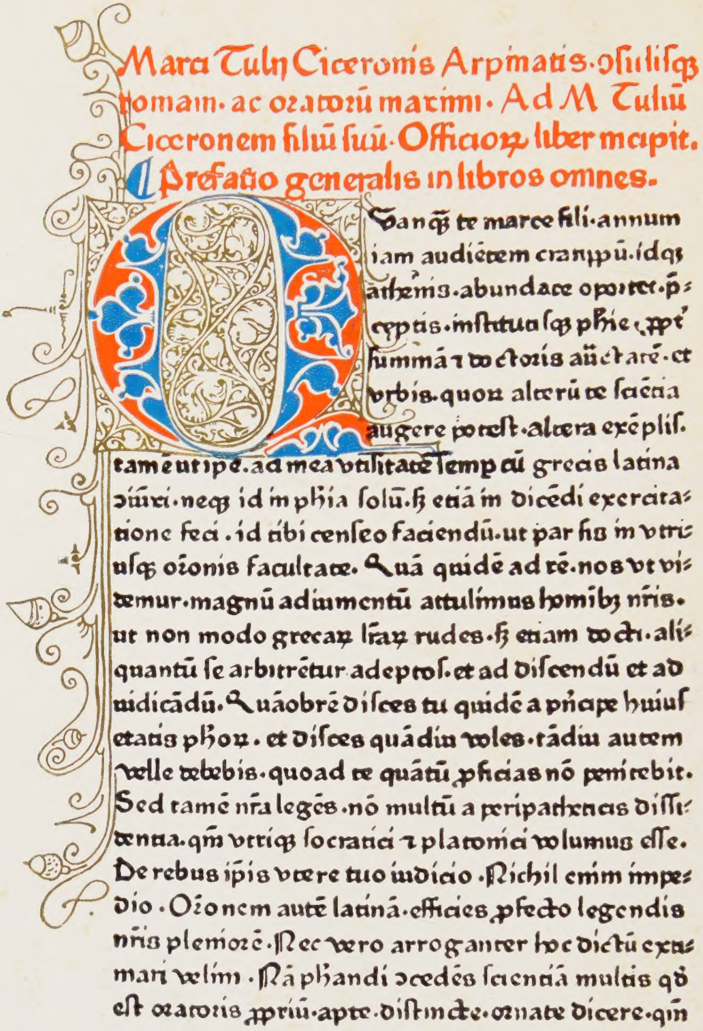


Marci Tulij Ciceronis Arpinatis·ꝯſuliſqꝫ romani· ac oratorū maximi· Ad M Tuliū Ciceronem filiū ſuū· Officioꝝ liber incipit.

¶ Prefatio generalis in libros omnes.

Quanqꝫ te marce fili·annum iam audiētem cratippū·idqꝫ athenis·abundare oportet·p̄ceptis·inſtitutiſqꝫ pħie ꝓpter ſummā ꝛ doctoris auctoritatē·et vrbis·quoꝝ alterū te ſciētia augere poteſt·altera exēpliſ. tamē ut ipē. ad meā vtilitatē ſemp cū grecis latina ꝯiunxi·neqꝫ id in pħia ſolū·ſꝫ etiā in dicēdi exercitatione feci·id tibi cenſeo faciendū·ut par ſis in vtriuſqꝫ oꝛonis facultate. Quā quidē ad rē·nos vt videmur·magnū adiumentū attulimus hoībꝫ nr̄is· ut non modo grecaꝝ lr̄aꝝ rudes·ſꝫ etiam docti·aliquantū ſe arbitrētur adeptoſ·et ad diſcendū et ad iudicādū· Quaobrē diſces tu quidē a pn̄cipe huiuſ etatis pħoꝝ· et diſces quādiu voles·tādiu autem velle debebis·quoad te quātū ꝓficias nō penitebit. Sed tamē nr̄a legēs·nō multū a peripateticis diſſidentia·qm̄ vtriqꝫ ſocratici ꝛ platonici volumus eſſe. De rebus ipis vtere tuo iudicio·Nichil enim impedio·Oꝛonem autē latinā·efficies ꝓfecto legendis nr̄is pleniorē·Nec vero arroganter hoc dictū exiſtimari velim·Nā pħandi ꝯcedēs ſciētiā multis qđ eſt oratoris ꝓpriū·apte·diſtincte·ornate dicere·qm̄

Illuminated first page of Cicero's *Officia et Paradoxia.* Printed by Fust and Schoeffer, Mainz, 1466. One of the first printed editions of a classic.

A
HISTORY OF PRINTING

ITS DEVELOPMENT
THROUGH FIVE HUNDRED YEARS

BY

JOHN CLYDE OSWALD

AUTHOR OF

Benjamin Franklin, Printer
Benjamin Franklin in Oil and Bronze

NEW YORK AND LONDON
D. APPLETON AND COMPANY
MCMXXVIII

PRINTED BY J. J. LITTLE & IVES CO., NEW YORK, U. S. A.

TO MY SON

with the hope that he will find the pleasure in work
that makes it easy

PREFACE

A CONTROVERSY over the problem of who was responsible for the European invention of printing from movable types has been going on for more than four hundred years, but it will be found that in the pages that follow, I have not attempted even to review the evidence offered on either side. Those who have the leisure and the disposition to devote to the subject will find it fully reviewed in the article "Typography," comprising more than one hundred thousand words, by J. H. Hessels in the eleventh edition of the Encyclopaedia Britannica.

It will be noted that I refer to the "European" invention of printing. I use the term advisedly. The Chinese discovery of the principle of typography in the eleventh century does not represent a step in the progress of the art. There are so many characters in what in Chinese corresponds to an alphabet that when Pi Sheng showed the way to printing from movable types, it was found that there was little that was labor-saving in his invention. It was not generally adopted, and the knowledge that the Chinese had invented typography did not reach Europe until after it had been invented independently there.

In gathering the material that I have used, I have received aid from many sources. The literature of printing is of considerable proportions. One needs but to inspect the great collection in the Library and Museum of the

American Type Founders Company in Jersey City, and others such as that in the Grolier Club and the Public Library in New York City and the Newberry Library in Chicago, to be convinced of that fact. I have had the benefit of these and many more.

It is the privilege of the historian to profit by the labors of his predecessors in the field of his researches, and I have availed myself to the fullest extent of that privilege. Our great obligation to those who have painstakingly delved into almost inaccessible sources of information has often been made manifest as I went along this bibliographical journey; for it is to the bibliographers that I owe much of what has been gathered between the covers of this volume — men like Alfred W. Pollard, former Keeper of Books in the British Museum, whose writings are a source of authentic information and never-failing inspiration; Wilberforce Eames and L. Nelson Nichols, of the New York Public Library, and Henry L. Bullen, librarian of the American Type Founders Company, who are always ready with helpful and patient assistance in any enterprise such as this. I am also indebted to William M. Ivins, Jr., and David Silve for reading the proofs.

With dependence upon the labors of others comes a duty, which is that of corroboration. Unfortunately much careless work has been performed in the name of history. It is an uncommon experience to find a book in which there is no misstatement — it does happen, but not often. I have not accepted any statement, no matter with what authority it has come, without making every *possible attempt at verification. Notwithstanding this care, however, it is too much to expect that this book will escape the usual fate. The best I can hope is that the errors will be few in number.*

Many of the illustrations are from books in my own possession. For others I am indebted to the New York Public Library and to generous friends. Two of the latter, who have been most obliging, are Dr. Joseph Martini and Dr. Otto H. F. Vollbehr. The illustrations in color are from the Vollbehr Collection.

JOHN CLYDE OSWALD

CONTENTS

CONTENTS

ILLUSTRATIONS

ILLUSTRATIONS

ILLUSTRATIONS

ILLUSTRATIONS

ILLUSTRATIONS

ILLUSTRATIONS

ILLUSTRATIONS

ILLUSTRATIONS

ILLUSTRATIONS

A
HISTORY OF PRINTING

A
HISTORY OF PRINTING

CHAPTER I

CRADLE BOOKS

FIFTEENTH-CENTURY books printed from movable types are considered to be of sufficient importance to justify their designation by a special title, that of "incunabula"—"cradle books," or books produced in the infancy of the art. "Cradle books," says Pollard, "a foolish but generally recognized slang name for what used to be called 'fifteeners.'" During the fifty years comprising the latter half of that century, probably thirty thousand editions under various titles were printed, of which about twenty-five thousand editions have been identified and described.

Of this number, one collection, that of the British Museum, contains, exclusive of duplicates, more than nine thousand different books. In many respects it is most thoroughly representative: of 115 books the printing of which has been attributed to Fust and Schoeffer, the collection possesses 78; of 116 attributed to three early printers at Strasbourg, it has 102; of 177 printed at Cologne by Ulrich Zell, there are 123. The Museum is issuing, "printed by order of the trustees," a catalogue of the incunabula in its possession which is of much significance to students of printing. Of this catalogue five parts, each containing from 145 to 598 pages, 10¼×14 inches in size, with many additional pages of facsimiles, have appeared to the present writing.

Through long association and diligent research, the compilers, all of high standing in the bibliographical world, speak with authority, and they apparently have no theories to establish and no beliefs to defend. And it is significant that with all the wealth of first-hand information they have at their command, they decline to record an opinion as to who it was that discovered the principle of printing from movable types. They assign priority to various productions of the printing press, but where any doubt whatever exists as to the producers, the bibliographers of the British Museum do no more than list the productions under the designation of "Anonymous Presses." The names of John Gutenberg and Laurens Coster do not appear in the lists of printers given in the work.

My own belief is that the honor of the citizenship of the inventor of printing from movable types belongs to Holland, because in Dutch books bound early in the fifteenth century there has been found paper, placed there to strengthen the bindings, on which printing evidently had been done from movable types. But who this earliest typographer was remains a mystery. The Hollanders claim that his name was Laurens Janszoon Coster. They erected a statue to his memory in Haarlem, and in 1823 celebrated in that city the four-hundredth anniversary of his supposed invention, which celebration Timperley's *Dictionary of Printing*, published in London in 1839, says was attended by a delegation of printers from Philadelphia. I have never seen, however, any evidence sufficiently strong to establish without question the claim made for Coster. Further reference to it is made in Chapter XIV.

After all, the important thing is that printing *was* invented, and not when and by whom. It would be interesting to know the details, and the time and effort spent in the search for them may be justified on the ground that the labor involved has not been entirely barren of results. The searchlights that have been brought to bear through the passing years upon every phase of the subject have added to printing lore. They have not, however, added lustre to the great outstanding fact that, regardless of whatever the attending circumstances may have been, printing from movable types was the greatest invention in secular history. It is from this point of vantage that it is proposed herewith to make a start.

In identifying John Gutenberg with the beginning of printing history, I have to acknowledge that the evidence upon which the conclusions are based is circumstantial. Limitations of space do not permit a review of all the evidence here. But it is an incontestable fact that there was a printer who operated on an important scale antecedent to John Fust and Peter

Schoeffer, the first printers about whose existence and productions there can be no question. This printer brought the art nearly to perfection, and no other name for him has been proffered that bears such weight in the estimation of even the most skeptical as does that of Gutenberg.

CHAPTER II

JOHN GUTENBERG OF STRASBOURG AND MAINZ

THERE is extant no book or other piece of printing issued during the lifetime of John Gutenberg that bears his name as printer or that gives any particulars in regard to him as being concerned in printing. The statements made about him by his biographers are based upon public records, most of which have disappeared and are now known only through copies. Many of these copies have been proved to be inaccurate; some, indeed, are known to have been forged. An assistant librarian at Mainz named Bodmann amused himself by forging records with which to dupe friends who were searching for Gutenberg documents, and it is suspected that another Mainz librarian named Fischer did likewise. Schorbach, a recent biographer, accepts 25 of the documents referring to Gutenberg as genuine; seventeen of these, however, are known only through copies and are therefore open to suspicion.

No document gives the date of Gutenberg's birth, but it is supposed to have occurred in the year 1398. His family was of the patrician class, his father's name being Friele zum Gensfleisch. He took, however, the surname of his mother, Elsgen Wyrich Gutenberg, instead of that of his father, because she was the last of her line, and it was a German custom for the son in such case to take his mother's name so that it might not become extinct. Mention of Gutenberg is assumed to be made in documents of 1420, 1427, and 1428, but they are doubtful. On January 16, 1430, there is a record of an arrangement by his mother in connection with an annuity belonging to him in which he is described as "not being in Mainz."

Gutenberg appears in the records of Strasbourg of 1436 to 1439 as a borrower from one Andreas Dritzehen in connection with his own business as a polisher of gems and maker of mirrors. The first of the records considered to connect him with the printing business appears in Strasbourg in 1438, when he entered into an arrangement with Andreas Dritzehen and Andreas and Anton Heilmann. In the testimony given in the lawsuit which followed, the word *drucken* was used by one of the witnesses. This, together with the use of the German equivalents of other words, such as "forms" and "tools," and the statement that Gutenberg was to teach his partners a secret, is construed to prove that printing was the project involved.

In 1441 there appears another record in which Gutenberg is shown as surety for a borrower, and in 1442 he himself appears as a borrower. In 1444 he paid a tax at Strasbourg.

Gutenberg's effort at printing must have been in some measure successful, for about 1450 John Fust, a goldsmith, advanced him 800 guilders on no other security than a mortgage on the "tools." It was a partnership arrangement, as was shown in the lawsuit

Fust brought against Gutenberg in 1455. Gutenberg testified that Fust was to advance regularly 300 guilders a year, without interest since the enterprise was organized for their common benefit, for expenses and the purchase of supplies, which part of the contract Gutenberg testified Fust had not carried out, although Fust testified that in 1452 he had advanced another 800 guilders. The suit was decided in Fust's favor, and apparently he took possession of the "tools."

In 1465 Gutenberg accepted from the reigning Archbishop of Mainz the post of salaried courtier, which carried an annuity of a suit of livery and a fixed allowance of corn and wine. He died at Mainz in 1468, and tradition has it that he was buried in the Franciscan Church in that city.

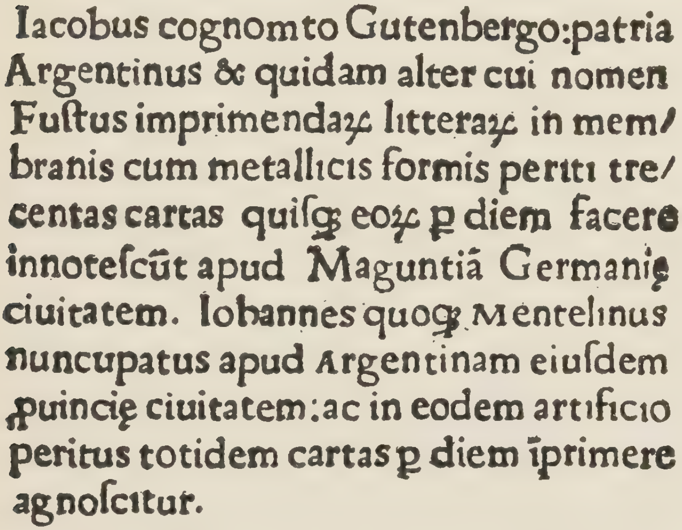
There is no definite information as to business activity on the part of Gutenberg beyond that set forth above, excepting that a document dated February 26, 1468, records the fact that Dr. Conrad Humery, a syndic (advocate) of Mainz, at one time supplied Gutenberg with printing equipment of various kinds which was returned to Dr. Humery after Gutenberg's death. Evidently Gutenberg had been in the printing business during the years succeeding the severance of his relations with John Fust. Tradition, which to some biographers carries the strength of fact, connects him with the practice of printing at Eltville, a town a few miles from Mainz across the River Rhine, during the interval between the foreclosure of Fust's mortgage in 1455 and his appointment to the position at the Archbishop's court in 1465.

John Schoeffer operated as a printer in Mainz from 1503 to 1531. He succeeded his father Peter in ownership of the printing office which it is generally believed was established by John Gutenberg and which was owned successively by John Fust, Fust and Schoeffer, and Peter Schoeffer. John Schoeffer was a grandson of John Fust and may be considered to have possessed first-hand information in regard to the early days of printing. In the colophons of several of the books printed by him are interesting references to the invention of printing. In some of them he credits it to Fust and Schoeffer and in others to Gutenberg, thus proving an unreliable witness.

In a book printed in Paris in 1470 is this statement by Guillaume Fichet, librarian of the Sorbonne, who was responsible for the introduction of printing in France two years earlier: "They tell us that there, not far from the city of Mainz, the art of printing was first of all invented by one John, whose surname was Gutenberg."

What seems to be further reliable early printed testimony definitely connecting John Gutenberg with the invention of printing is a "Chronicle" printed at Rome in 1474, six years after Gutenberg's death, by John Philip de Lignamine, who had established a printing office there in 1470. John Philip is said by some historians to have been house physician to Pope Sixtus IV, but the statement lacks corroboration.

There is no record of the circumstances under which he became a printer, but he had a local reputation as author, editor, and chronicler. On page 120 of the "Chronicle" appears the following account of the innovators of printing from movable types:

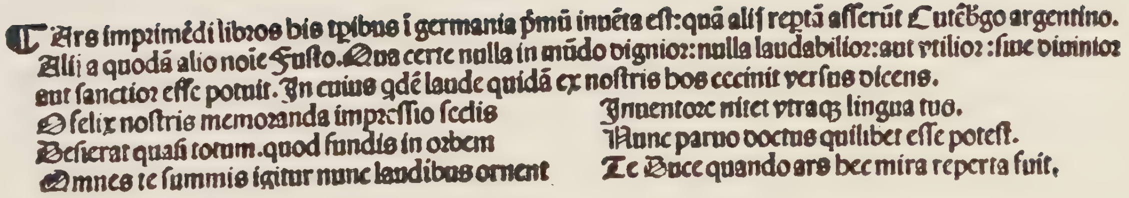


Iacobus cognomto Gutenbergo:patria
Argentinus & quidam alter cui nomen
Fuſtus imprimendaꝝ litteraꝝ in mem/
branis cum metallicis formis periti tre/
centas cartas quiſq; eoꝝ ꝑ diem facere
innoteſcūt apud Maguntiā Germanię
ciuitatem. Iohannes quoq; Mentelinus
nuncupatus apud Argentinam eiuſdem
ꝓuincię ciuitatem:ac in eodem artificio
peritus totidem cartas ꝑ diem ĩprimere
agnoſcitur.

Statement in regard to Gutenberg and Fust in Riccobaldus Ferrariensis' *Chronica Summorum*. Printed by John Philip de Lignamine, Rome, 1474.

which reads in translation:

Jacobus, surnamed Gutenberg, a native of Strasbourg, and a certain other whose name was Fust, having attained skill in making impressions of letters upon parchment by means of metal types, became known at Mainz, a city of Germany, as the printers each of three hundred leaves a day. John also, styled Mentelin, at Strasbourg, a city of the same country, a skillful worker in the same art, comes into notice as the printer of just as many leaves a day.



¶ Ars imprimẽdi libros his tp̃ibus i germania p̃mũ inuẽta eſt: quã alij reptã aſſerũt Cutẽbgo argentino. Alij a quodã alio noie Fuſto. Qua certe nulla in mũdo dignior: nulla laudabilior: aut vtilior: ſiue diuinior aut ſanctior eſſe potuit. In cuius qdẽ laude quidã ex noſtris hos cecinit verſus dicens.

O felix noſtris memoranda impreſſio ſeclis
Inuentore nitet vtraq̃ lingua tuo.
Deſierat quaſi totum. quod fundis in orbem
Nunc paruo doctus quilibet eſſe poteſt.
Omnes te ſummis igitur nunc laudibus ornent
Te duce quando ars hec mira reperta fuit.

Contemporaneous testimony in regard to the invention of printing from Bergomensis' *Supplementum Chronicarum.* Printed at Venice in 1486 by Bernardinus de Benalius. Translated, it reads as follows: "The art of printing books was at this time (1458) first invented in Germany, some say by Gutenberg of Strasbourg, others say by Fust. It is certain that no matter how worthy, how laudable, and how useful they were, without divine aid and sanction it would not have been possible. In praise of which a certain fellow of ours has composed the following verse: 'O happy printing art, to be celebrated in our century, and diffused throughout the world; so let all adorn you with high praises. Language is made resplendent by your invention, and now everyone may become learned with little labor, under your guidance, since this memorable art was founded.'"

In the first illustrated edition of Bergomensis' *Supplementum Chronicarum*, a volume of nearly six hundred pages printed by Bernardinus de Benalius at Venice in 1486, which book was "intended to serve for the correction and completion of all previous historical records," appears under date of 1458 an account of the invention of printing which mentions both Fust and Gutenberg.

The different pieces of printing ascribed to Gutenberg by the German biographers, whose list is naturally the longest, number less than fifty. Among the earliest is the so-called "31-Line Indulgence." It carries no printer's name or place of printing, but there was printed upon it the year of issue, 1454, and a specimen still preserved in the British Museum bears a manuscript notation to the effect that it was sold at Erfurt on the 22d of October of that year. An Indulgence dated 1455 is in the Morgan Library.

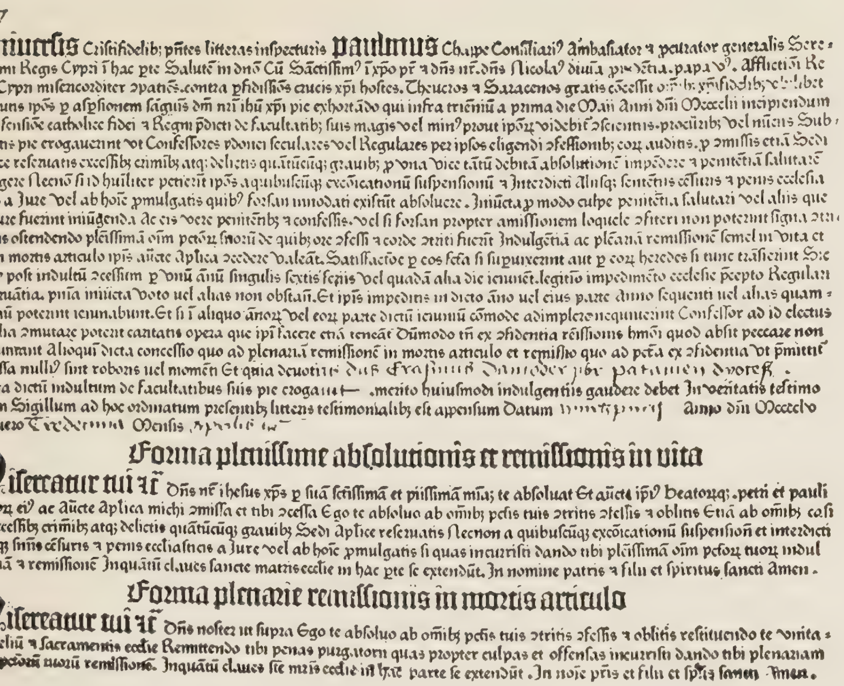
The remainder of the work attributed to Gutenberg's Press comprised Bibles, broadsides, "donatuses," calendars, etc. Not much of it was important from the printer's point of view excepting two Bibles and a *Catholicon* (theological grammar and dictionary).

The two Bibles are known as the "36-Line Bible" and the "42-Line Bible," the latter sometimes called the "Mazarin Bible" because the first copy to become known in recent years was found in the library of Cardinal Mazarin in Paris. The fact of the existence of the 42-Line Bible, however, had previously been mentioned by German bibliographers. In neither of the Bibles nor the *Catholicon* is to be found the name of its printer. The colophon of the *Catholicon* reads as follows:

> By the help of the Most High, at Whose will the tongues of infants become eloquent, and who ofttimes reveals to the lowly that which He hides from the wise, this noble book *Catholicon*, in the year of the Lord's Incarnation, 1460, in the bounteous city of Mainz of the renowned German nation, which the clemency of God has deigned with so lofty a light of genius and free gift to prefer and render illustrious above all other nations of the earth, without help of reed, stilus, or pen, but by the wondrous agreement, proportion, and harmony of punches and types, has been printed and brought to an end.

Most of the adherents of Gutenberg credit him with all three volumes, chronologically listing the 42-Line Bible first and the *Catholicon* last. Pollard takes no definite stand on the subject but says: "The contest between the champions of the 36-Line and the 42-Line Bibles is yet far from being decided. The claims of the former to priority appear to be steadily gaining ground." Seymour de Ricci, while crediting Gutenberg with originating the 36-Line type, says he never used it; that the Bible "was issued from the Press about 1460 at Bamberg, by his disciple, Albert Pfister." Only ten copies of the 36-Line Bible are known, six in Germany, two in England, and one each in Belgium and France. Dziatzko's demonstration that the text of the 36-Line Bible was copied from the 42-Line Bible is convincing.

The 42-Line Bible consists of 641 printed leaves,



niuersis Cristifidelib; p̄ntes litteras inspecturis **Paulinus** Chappe Consiliari⁹ ambasiator ⁊ procurator generalis Sere-
nissimi Regis Cypri ī hac pte Salutē in dn̄o Cū Sāctissim⁹ ī xp̄o pr̄ ⁊ dn̄s nr̄. dn̄s Nicola⁹ diuīa prouidētia. papa v⁹. Afflictiōi Re-
gni Cypri misericorditer ꝯpatiēs. contra pfidissimos crucis xp̄i hostes. Theucros ⁊ Saracenos gratis cōcessit oīb; xp̄ifidelib; [illegible]
uis ipsos p aspsionem sāguīs dn̄i nr̄i ihū xp̄i pie exhortādo qui infra trieniū a prima die Maii Anni dn̄i Mcccclii incipiendum
defensiōe catholice fidei ⁊ Regni p̄dicti de facultatib; suis magis vel min⁹ prout ipsoꝝ videbit̄ ꝯsciētiis. procurātib; vel nūciis Sub-
stitutis pie erogauerint vt Confessores ydonei seculares vel Regulares per ipsos eligendi ꝯfessionib; eoꝝ auditis. p ꝯmissis etiā Sedi
Apostolice reseruatis excessib; crimib; atq; delictis quātūcūq; grauib; p vna vice tātū debitā absolutionē impēdere ⁊ penitētiā salutarē
iniungere Necnō si id huilit̄ petierīt ipsos a quibuscūq; excōicationū suspensionū ⁊ Interdicti Aliisq; sentētiis cēsuris ⁊ penis ecclesia-
sticis a Jure vel ab hoīe pmulgatis quib⁹ forsan innodati existūt absoluere. Iniūcta p modo culpe penitētia salutari vel aliis que
de iure fuerint iniūgenda. Ac eis vere penitētib; ⁊ confessis. vel si forsan propter amissionem loquele ꝯfiteri non poterint signa ꝯtri-
tionis ostendendo plenissimā oīm peccatoꝝ suoꝝ de quib; ore ꝯfessi ⁊ corde ꝯtriti fuerīt Indulgētiā ac plenariā remissionē semel in vita et
semel in mortis articulo ipsis aūcte ap̄lica ꝯcedere valeāt. Satisfactiōe p eos facta si supuixerint aut p eoꝝ heredes si tunc trāsierint Sic
tamen quod post indultū ꝯcessum p vnū ānū singulis sextis feriis vel quadā alia die ieiunēt. legitīo impedimēto ecclesie p̄cepto Regulari
obseruātia. pniā iniūcta voto uel alias non obstañ. Et ipsis impeditis in dicto ānō uel eius parte anno sequenti uel alias quam-
primū poterint ieiunabunt. Et si ī aliquo ānoꝝ vel eoꝝ parte dictū ieiuniū cōmode adimplere nequiuerint Confessor ad id electus
in alia ꝯmutare poterit caritatis opera que ipsi facere etiā teneāt̄ Dūmodo tñ ex ꝯfidentia remissionis hmōi quod absit peccare non
presumant alioquī dicta concessio quo ad plenariā remissionē in mortis articulo et remissio quo ad peccata ex ꝯfidentia vt p̄mittit̄
commissa nulli⁹ sint roboris uel momēti Et quia deuoti [illegible] Erasmus [illegible] patamen [illegible] .
iuxta dictū indultum de facultatibus suis pie erogauit — merito huiusmodi indulgentiis gaudere debet In veritatis testimo-
nium Sigillum ad hoc ordinatum presentib; litteris testimonialib; est appensum Datum [illegible] Anno dn̄i Mcccclv
die vero [illegible] Mensis Aprilis [illegible]

Forma plenissime absolutionis et remissionis in vita

Misereatur tui ⁊c̄ Dn̄s nr̄ ihesus xp̄s p suā sctissimā et piissimā mīa; te absoluat Et aūcte ip̄i⁹ beatoꝝq; . petri et pauli
apostoloꝝ ei⁹ ac aūcte ap̄lica michi ꝯmissa et tibi ꝯcessa Ego te absoluo ab oīb; pctis tuis ꝯtritis ꝯfessis ⁊ oblitis Etiā ab oīb; casib;
excessib; crimib; atq; delictis quātūcūq; grauib; Sedi ap̄lice reseruatis Necnon a quibuscūq; excōicationū suspensionū et interdicti
aliisq; sniīs cēsuris ⁊ penis ecclesiasticis a Jure vel ab hoīe pmulgatis si quas incurristi dando tibi plenissimā oīm pctoꝝ tuoꝝ indul-
gentiā ⁊ remissionē Inquātū claues sancte matris ecclie in hac pte se extendūt. In nomine patris ⁊ filii et spiritus sancti Amen.

Forma plenarie remissionis in mortis articulo

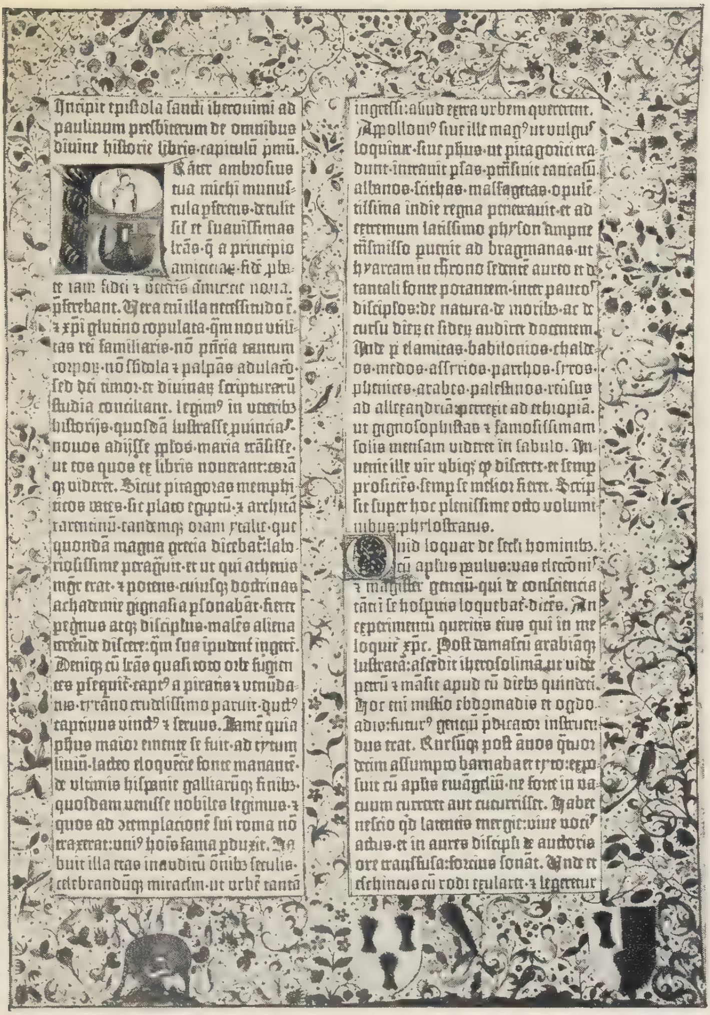
Misereatur tui ⁊c̄ Dn̄s noster ut supra Ego te absoluo ab oīb; pctis tuis ꝯtritis ꝯfessis ⁊ oblitis restituendo te vnitati fi-
deliū ⁊ sacramentis ecclie Remittendo tibi penas purgatorii quas propter culpas et offensas incurristi dando tibi plenariam
oīm pctoꝝ tuoꝝ remissionē. Inquātū claues sc̄e mrīs ecclie in hac parte se extendūt. In noīe pr̄is et filii et sp̄us sancti Amen.

Reproduction (much reduced) of a printed Letter of Indulgence, dated 1455, and probably printed by Gutenberg before the completion of the 42-Line Bible. Original in the Morgan Library, New York.

of 1,282 pages, in folio, without printed numerals, signatures, or catchwords. There were two editions, one on paper and one on vellum. The paper used was, of course, hand-made and of a very fine and good texture. The watermarks are a bull's head with a star and a bunch of grapes.

Although the lengths of the pages in the 42-Line Bible are the same, the number of lines per page varies from 40 to 42, the first nine pages containing 40 and the tenth 41. This variance is explained on the theory that the shoulders of the types were filed down between one use and another. A more plausible theory is that new types were cast for the later pages. It is considered that the work began about 1450, certainly not later than 1452. Dr. Paul Schwenke, a German scholar, devoted himself to much painstaking study of the Bible, which he gave to the world in an elaborate volume published in 1923. Of his researches the British Museum Catalogue says:

> Dr. Paul Schwenke, carrying forward the results obtained by Dr. Dziatzko and other scholars, has shown that the book was printed in ten sections on six presses, of which two began work simultaneously at 1^{a} and 129^{a}, and after these had each printed a quire, a third began at 325^{a}, the first leaf of Vol. II. When the three presses had respectively printed up to 32^{a}, 158^{b}, and 340^{a}, and a fourth and fifth had printed 487^{a} and 261^{a}, it was resolved to increase the size of the edition, and these pages had subsequently to be set up afresh, so that additional copies of them might be printed. Previously to this an increase from 40 to 42 had been made in the number of lines to a column, and to



First page of the 42-Line Bible, this page, however, carrying only 40 lines to the column.

facilitate this the type had been twice filed, so that 42 lines of the reduced size measure a little less than 40 of the old.

In this copy leaves 129–132^a have only 40 lines to a column, and leaves 21–32^a, 129–158, 261^a, 325–340^a, and 478^a, belong to the earlier impressions, printed before it was resolved to increase the number of copies.

As to the date of issue the Museum catalogue sums up the known information by saying:

> In a manuscript note in a copy of this Bible belonging to the Bibliothèque Nationale at Paris, Henricus Cremer, Vicar of S. Stephen's at Mainz, states that he finished rubricating and binding it on August 24, 1456. Copies must therefore have been on sale some weeks before this date. A still earlier date, 1453, is written on 324^b of a copy in the Buchgewerbemuseum at Leipzig, and may possibly be of relevance.

The type was usually printed in black ink, space being left for the initial letters to be added in red ink by hand. In some cases, however, type was used for the letters in color.

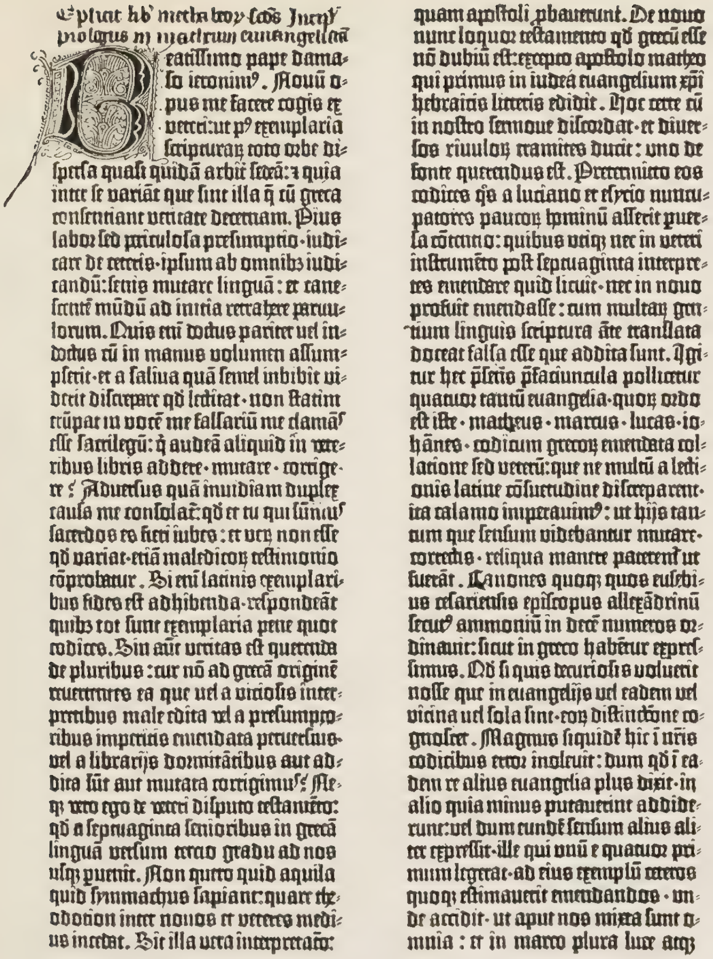
Schwenke estimates that the edition was limited to 210 copies, 180 on paper and 30 on vellum. De Ricci satisfied himself as to the printing of 45 complete copies, only about twenty-five of which are in perfect condition, and of twelve other copies known to have been in existence but the location of which is not now known. Fragments of other copies to the number of 27 have been discovered.

Nine copies are in America. The Morgan Library in New York has two copies, one printed on paper and the other on vellum, each of these copies being bound in two separate volumes, and another incomplete copy bound in one volume. There is one copy each in the New York Public Library, the library of the General Theological Seminary of New York, and the library of Yale University. The others are in private hands.

The paper copies are better printed than are the vellum copies. The Morgan paper copy is said to be the best in existence. Bernard Quaritch, the well-known London bookseller and bibliographer, wrote on one of its fly-leaves under date of February 20, 1886: "This is the finest copy of the Mazarin Bible ever beheld by me or anybody else." In this copy there are manuscript memoranda of signatures and numbers of chapters at the foot and on the margin of the pages, probably in the handwriting of the printer.

A copy on vellum now in the library of the late Henry E. Huntington of San Gabriel, California, was in the Robert Hoe library which was sold in 1911, as was also the copy on paper now in the library of P. A. B. Widener of Philadelphia. These two copies brought $50,000 and $27,500 respectively in the Hoe sale. A paper copy which came from a monastery near Melk, on the Danube, was sold at public auction in New York in 1926, bringing the record price of $106,000. It was later purchased for $120,000 and presented to Yale University.

The latest complete vellum copy to come on the market was the so-called "Blasius Bible," until 1926



Explicit lib' machabeoꝝ ſcd's Incipit prologus in matheum euangeliſtā

Beatiſſimo pape damaſo ieronim⁹. Nouū opus me facere cogis ex veteri: ut poſt exemplaria ſcripturaꝝ toto orbe diſperſa quaſi quidā arbit̄ ſedeā: ⁊ quia inter ſe variāt que ſint illa q̄ cū greca conſentiant veritate decernam. Pius labor ſed periculoſa preſumptio · iudicare de ceteris · ipſum ab omnibꝫ iudicandū: ſenis mutare linguā: et caneſcentē mūdū ad initia retrahere paruulorum. Quis enī doctus pariter vel indoctus cū in manus volumen aſſumpſerit · et a ſaliua quā ſemel inbibit viderit diſcrepare qđ lectitat · non ſtatim erūpat in vocē me falſariū me clamās eſſe ſacrilegū: q̄ audeā aliquid in veteribus libris addere · mutare · corrigere? Aduerſus quā inuidiam duplex cauſa me conſolat̄: qđ et tu qui ſūmus ſacerdos es fieri iubes: et verū non eſſe qđ variat · etiā maledicoꝝ teſtimonio cōprobatur. Si enī latinis exemplaribus fides eſt adhibenda · reſpondeāt quibꝫ tot ſunt exemplaria pene quot codices. Sin aūt veritas eſt querenda de pluribus: cur nō ad grecā originē reuertentes ea que vel a vicioſis interpretibus male edita vel a preſumptoribus imperitis emendata peruerſius · vel a librariis dormitātibus aut addita ſūt aut mutata corrigimus? Neq; vero ego de veteri diſputo teſtamēto: qđ a ſeptuaginta ſenioribus in grecā linguā verſum tercio gradu ad nos uſq; puenit. Non quero quid aquila quid ſymmachus ſapiant: quare theodocion inter nouos et veteres medius incedat. Sit illa vera interpretatio: quam apoſtoli pbauerunt. De nouo nunc loquor teſtamento qđ grecū eſſe nō dubiū eſt: excepto apoſtolo matheo qui primus in iudea euangelium xp̄i hebraicis litteris edidit. Hoc certe cū in noſtro ſermone diſcordat · et diuerſos riuuloꝝ tramites ducit: uno de fonte querendus eſt. Pretermitto eos codices quos a luciano et eſychio nuncupatos paucoꝝ hominū aſſerit puerſa contentio: quibus utiq; nec in veteri inſtrumēto poſt ſeptuaginta interpretes emendare quid licuit · nec in nouo profuit emendaſſe: cum multaꝝ gencium linguis ſcriptura āte tranſlata doceat falſa eſſe que addita ſunt. Igitur hec p̄ſens p̄fatiuncula pollicetur quattuor tantū euangelia · quoꝝ ordo eſt iſte · matheus · marcus · lucas · iohānes · codicum grecoꝝ emendata collatione ſed veterū: que ne multū a lectionis latine cōſuetudine diſcreparent · ita calamo imperauim⁹: ut hiis tantum que ſenſum videbantur mutare · correctis · reliqua manere pateremꝰ ut fuerāt. Canones quoq; quos euſebius ceſarienſis epiſcopus allexādrinū ſecut⁹ ammoniū in decē numeros ordinauit: ſicut in greco habētur expreſſimus. Qđ ſi quis de curioſis voluerit noſſe que in euangeliis vel eadem vel vicina vel ſola ſint · eoꝝ diſtinctōne cognoſcet. Magnus ſiquidē hic ī nr̄is codicibus error inoleuit: dum qđ ī eadem re alius euangelia plus dixit · in alio quia minus putauerint addiderunt: vel dum eundē ſenſum alius aliter expreſſit · ille qui unū e quattuor primum legerat · ad eius exemplū ceteros quoq; eſtimauerit emendandos · unde accidit · ut apud nos mixta ſunt omnia: et in marco plura luce atq;

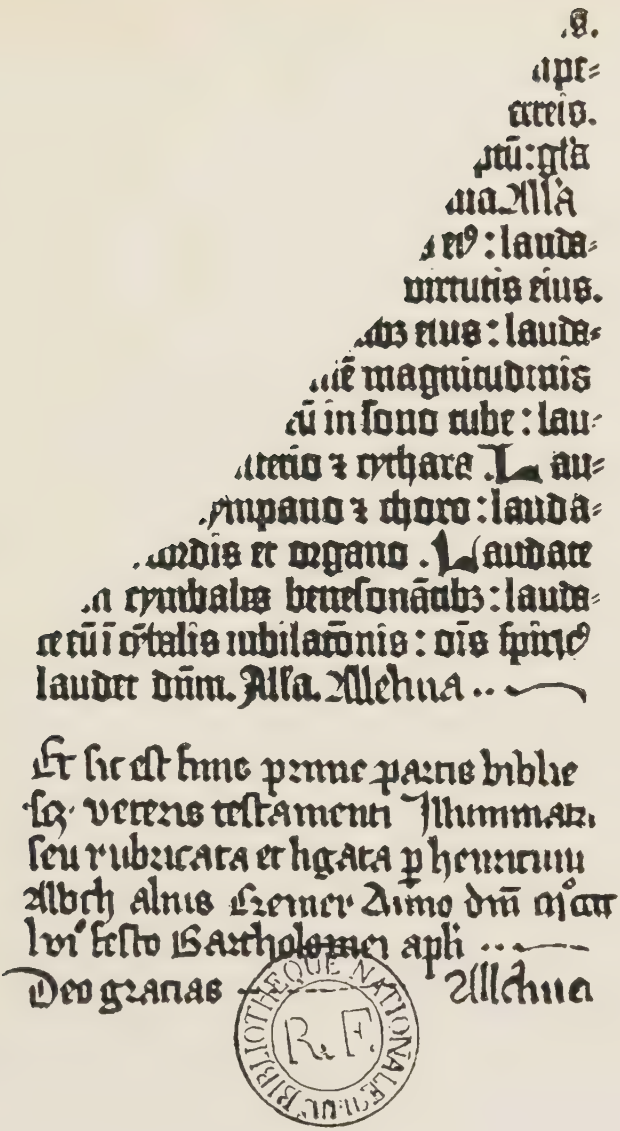
Type page of the 42-Line Bible.

owned by the Paulist Fathers of Lavant Valley in Carinthia, who disposed of the two volumes to Dr. Otto H. F. Vollbehr of Berlin for $275,000. This Bible had been brought to Carinthia by Benedictine friars who fled across the Alps from St. Blasius in the Black Forest during the Napoleonic wars. The bibliophile, Abbot Gerber of St. Blasius, early in the eighteenth century declared this Bible to be one of those which Fust was said to have sold in Paris as a pretended manuscript.

A New York dealer in rare books a few years ago acquired an incomplete copy which came into the market through the sale of the Curzon private library in England. It was purchased for that library in 1832 from the Königliche Bibliothek of Munich, which disposed of it for 500 florins because it was incomplete and a duplicate. Knowing the desire of many persons to possess a specimen of this rare example of printing, the dealer disposed of it in parts, ranging in size from single leaves to complete chapters, each unit encased in appropriate binding.

A Gutenberg Museum is maintained in Mainz, in which are preserved many valuable exhibits connected with the early history of printing. Among them is a copy of the 42-Line Bible. There are also reproductions of some fifty alleged portraits of John Gutenberg.

No authentic portrait of Gutenberg at any period of his life has been preserved. Of the statues from designs based upon tradition that have been erected to his memory, the most acceptable is that by the



.8.
apt=
arreis.
pnū: glā
ma. Allā
s eī9: lauda=
virtutis eius.
ibꝫ eius: lauda=
iē magnitudinis
eū in sono tube: lau=
lterio ꝛ cythare. La au=
ympano ꝛ choro: lauda=
cordis et organo. Laudate
in cymbalis benesonātibꝫ: lauda=
te eū ī cymbalis iubilacōnis: oīs spirit9
laudet dnm. Alla. Alleluia ..

Et sic est finis prime partis biblie
scꝫ veteris testamenti Illuminata
seu rubricata et ligata p henricum
Albch alias Cremer Anno dm̄ mcccc
lvi festo Bartholomei apli
Deo gracias Alleluia

Rubricator's ms. notation at the end of Volume I of the paper copy of the 42-Line Bible in the Bibliothèque Nationale, Paris, giving date of the completion of his work, August 24, 1456.

Danish sculptor Thorwaldsen which was erected in the Gutenberg Platz in Mainz in 1837. Another by David d'Anvers appears in a square bearing a similar name in Strasbourg, and a replica of it adorns the courtyard of the Government printing office in Paris.

Two Gutenberg statues have been erected in America, one, by Ralph Goddard, over the entrance of R. Hoe and Company's factory in New York City, and the other, by Ernst Plassman, originally in front of a newspaper office on Printing House Square, New York, but now in the entrance of the factory and main offices of the American Type Founders Company in Jersey City.

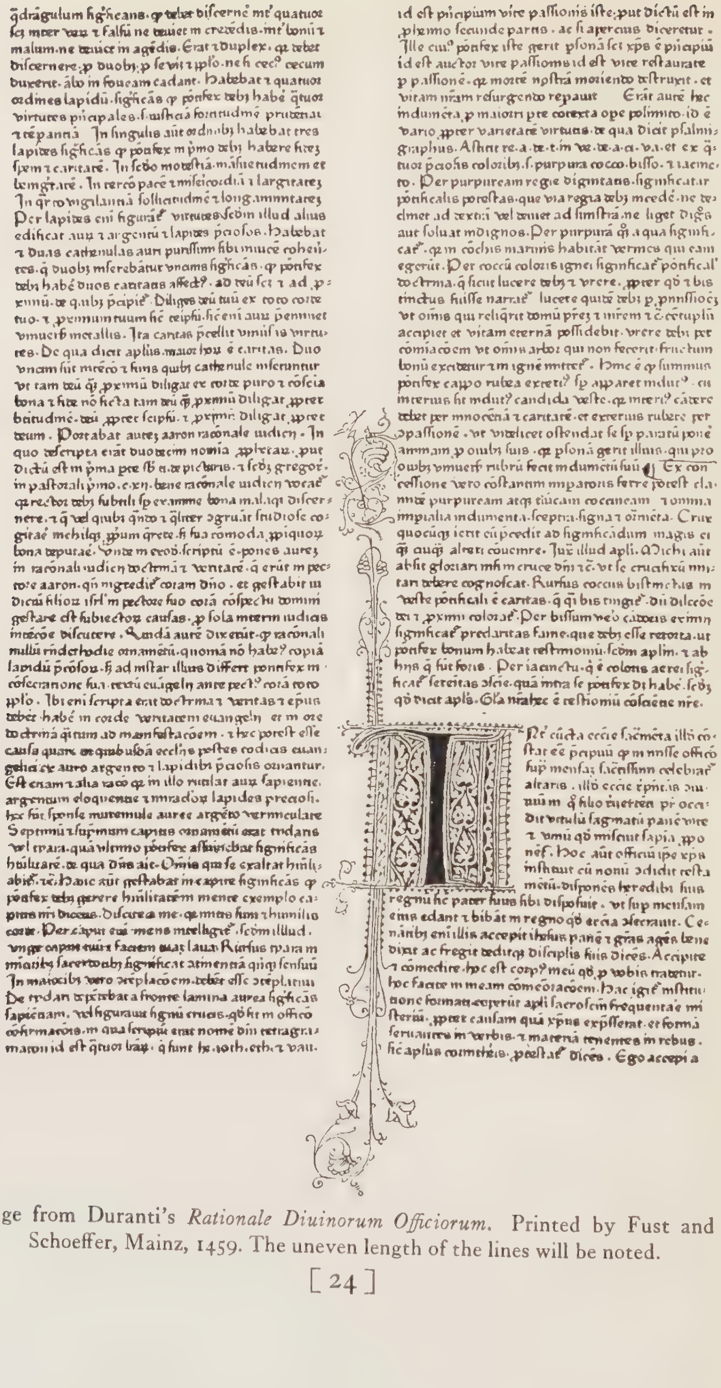
CHAPTER III

FUST AND SCHOEFFER

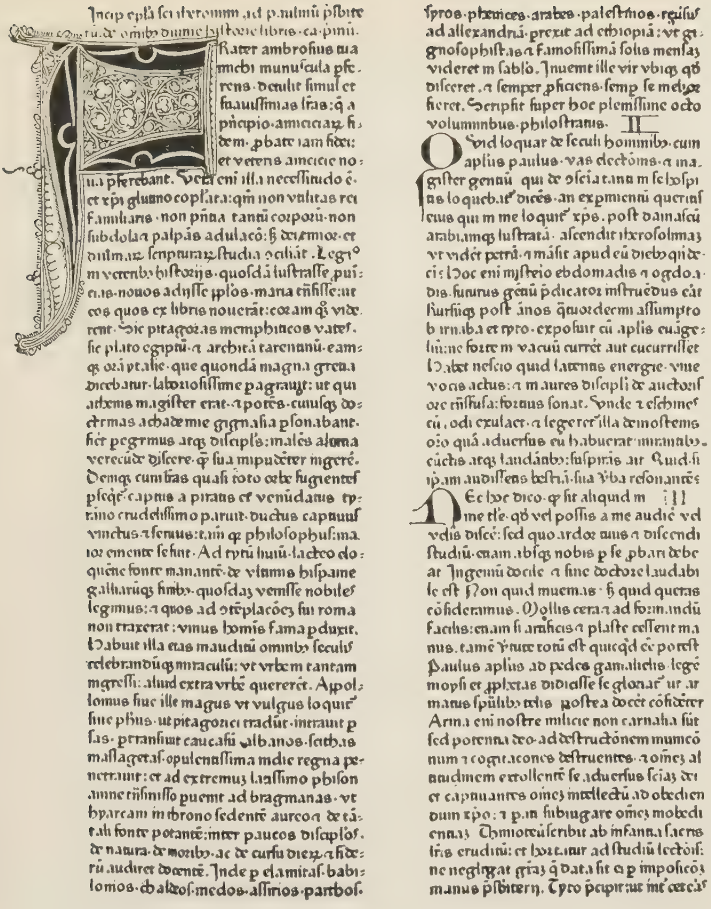
WHEN John Fust foreclosed his mortgage on John Gutenberg's printing outfit, the loan had grown to 2,226 guilders. Fust came into possession of the plant in 1455. He is said by tradition to have been a goldsmith; it is known that he was a banker and money-lender. The name was usually spelled Fust until 1506, when his grandson, John Schoeffer, in the dedication of a newly printed book, spelled it Faust, which spelling was thenceforward adopted by the family.

A tablet on a building in Mainz designates it as the location to which Fust removed the printing office and set it up with Peter Schoeffer, Gutenberg's principal workman, in charge. The statement in regard to the location of the Press is also based on tradition. The partnership between Fust and Schoeffer continued until 1466.

The first book to be produced by the new firm was a Psalter (choir book). It was produced under the same date (1457) in two editions, one of 143 leaves and the other of 175 leaves, with, of course, double the number of pages in each case. It is considered that the 143-leaved edition was intended for the use of various archiepiscopal sees, the extra 32 leaves in the other edition applying to some special see. The 175-leaved



Page from Duranti's *Rationale Diuinorum Officiorum.* Printed by Fust and Schoeffer, Mainz, 1459. The uneven length of the lines will be noted.



First page of first Bible with date. Printed by Fust and Schoeffer, Mainz, 1462.

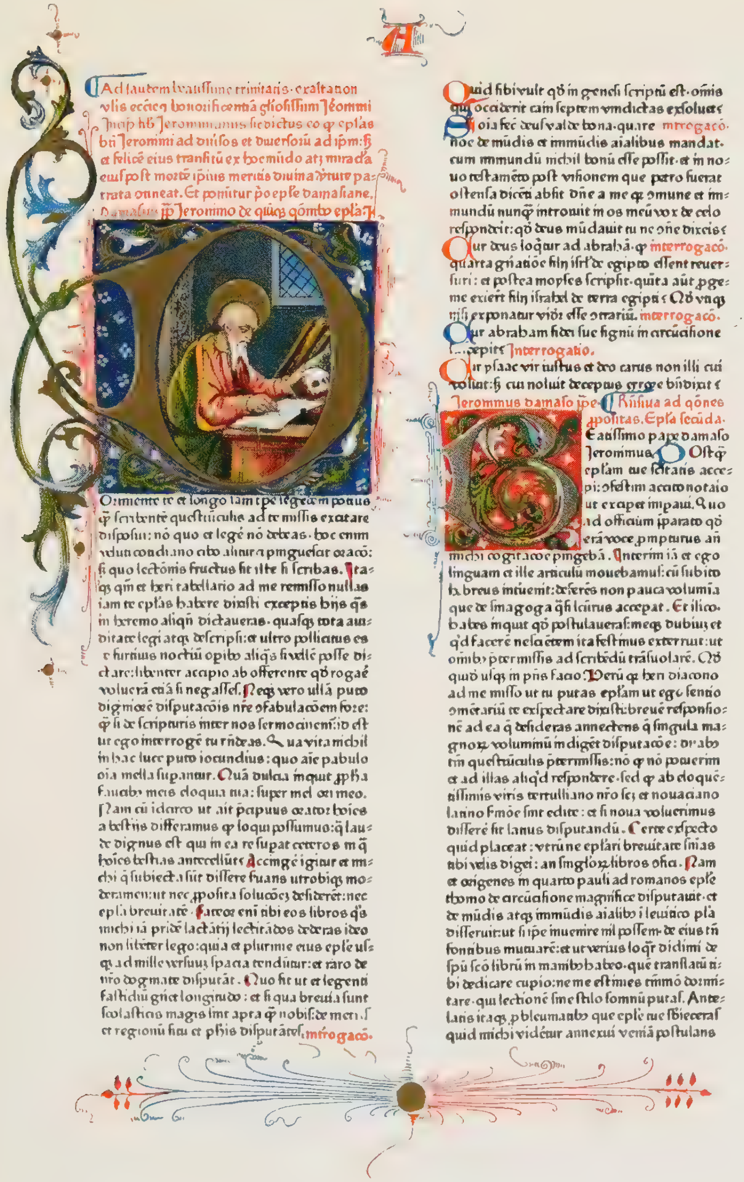
edition was paid for by the citizens of Mainz and was probably intended for the see of that city.

The Psalter was printed throughout in missal letters of two sizes, the text of the psalms, canticles, creeds, etc., in the larger type, with 20 lines to a page, and the directions, prayers, and liturgical matter in the smaller type with 24 lines to a page. The pages are 7⅝×11¼ inches in size. The printing is in black and red with initial letters in blue. These initial letters, of which there are 288, were cut in wood with a delicacy which has seldom been surpassed. The number of copies of the Psalter issued in 1457 is estimated to have been from twelve to twenty.

The Psalter of 1457 is famous as the first book printed with a date. The colophon gives the date and some further particulars in regard to its production as follows:

> This work of the Psalms, a book embellished with beautiful capitals, and sufficiently distinguished with rubric letters, was thus formed by an ingenious invention or printing, with separate characters, without any writing of the pen, and carefully finished for the worship of God, by John Fust, citizen of Mentz, and Peter Schoeffer, of Gernszheim; in the year of the Lord one thousand four hundred and fifty-seven. On the eve of the Assumption [August 14].

The Psalter was reprinted with the same type in 1458, 1459, 1490, 1502, and 1516. The edition of 1459 is the one most prized by collectors. It has been described as "the glory of Fust and Schoeffer's Press."



Illuminated first page of St. Jerome's *Epistles.* Printed by Peter Schoeffer, Mainz, 1470. (Reduced.)

It was intended for the use of the Benedictine Abbey of St. James in Mainz, which probably bore the expense.

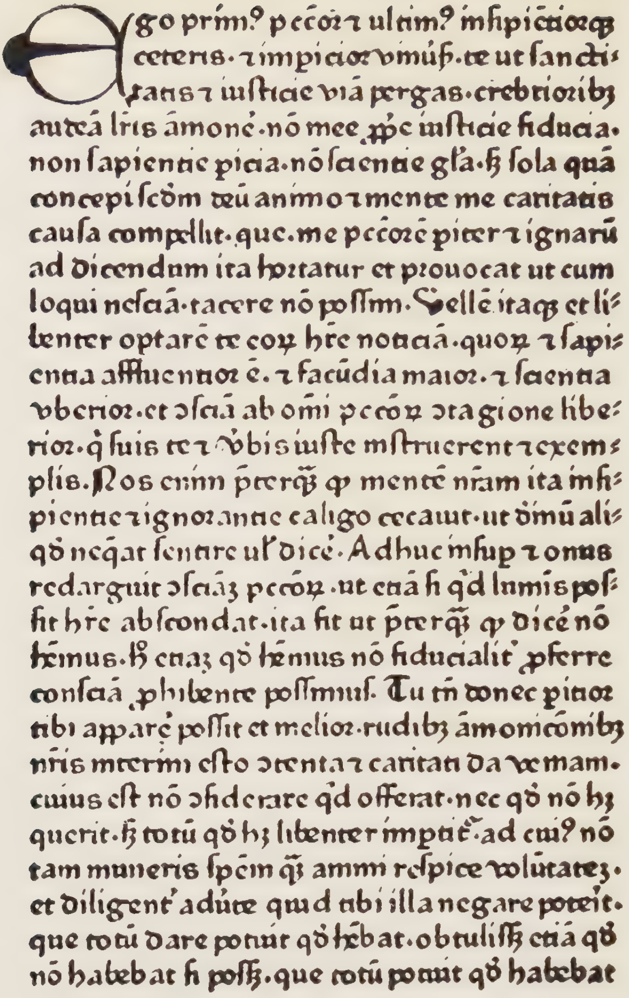
In 1462 appeared the "Bible of 48 Lines" in two folio volumes, the first Bible with a printed-in date.

One hundred and fifteen books have been credited to Fust and Schoeffer. They were the first printers to use a printer's mark, and the first to become their own publishers. Fust died in Paris about the year 1466 while there for the purpose of furthering the sale of the firm's publications.

After Fust's death the business was continued by Peter Schoeffer, under his own name although in partnership with Fust's sons. The first book to appear under his name, which he printed in full as "Petrum Schoiffher de gernsheim," was an edition of Thomas Aquinas, published in 1467. The text is in his smallest type, in double columns, with 60 lines to a column. In it the rounded form of the letter "h" made its first appearance.

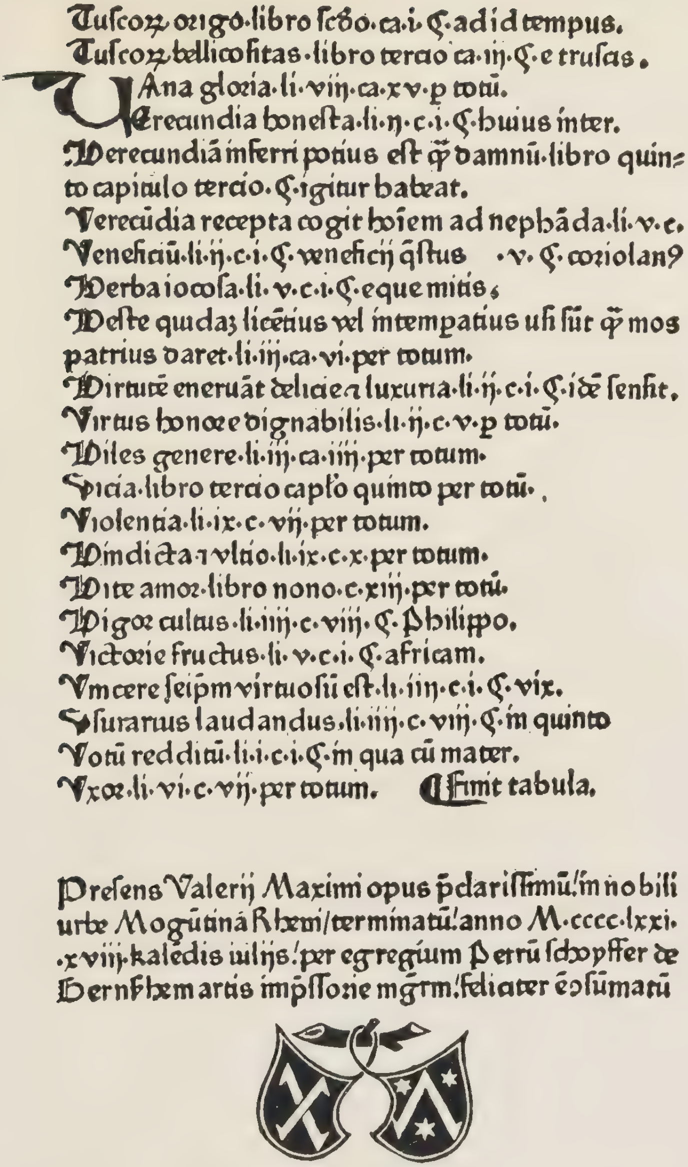
Peter Schoeffer (or Shepherd, as it would be in English) is an outstanding figure in the history of printing. Not much is known of his early history, but he was a college man, having been educated at the University of Paris.

Pollard places Schoeffer in a high, if not the highest, place in the early annals of printing. "In my view," he said in a letter to the author, "it [printing] was brought to perfection by Peter Schoeffer, to whom I attribute both the Indulgences (30-Line and 31-Line)



Ego prim⁹ peccōꝛ ⁊ ultim⁹ inſipiētioꝛqꝫ ceteris· ⁊ impicioꝛ vniuſ͛· te ut ſanctitatis ⁊ iuſticie viā pergas· crebrioꝛibꝫ auteā lr̄is āmonē· nō mee ꝓpe iuſticie fiducia· non ſapientie picia· nō ſciētie glā· ſꝫ ſola quā concepi ſcd̄m deū animo ⁊ mente me caritatis cauſa compellit· que· me peccorē piter ⁊ ignarū ad dicendum ita hoꝛtatur et pꝛouocat ut cum loqui neſciā· tacere nō poſſim· Vellē itaqꝫ et libenter optarē te coꝝ hr̄e noticiā· quoꝝ ⁊ ſapiencia affluencioꝛ ē· ⁊ facūdia maioꝛ· ⁊ ſciencia vberioꝛ· et ꝯſciā ab om̄i peccōꝝ ꝯtagione liberioꝛ· q̊ ſuis te ⁊ v̊bis iuſte inſtruerent ⁊ exemplis. Nos enim p̄terq̄ꝫ ꝙ mentē nr̄am ita inſipiencie ⁊ ignoꝛancie caligo cecauit· ut d̄mū aliqd̄ nequeat ſentire ul' dicē· Adhuc inſup ⁊ onus redarguit ꝯſciāꝫ peccōꝝ· ut etiā ſi q̊d lumis poſſit hr̄e abſcondat· ita ſit ut p̄terq̄ꝫ ꝙ dicē nō hēmus· ſꝫ etiaꝫ qd̄ hēmus nō fiducialit' ꝓferre conſciā ꝓhibente poſſimuſ. Tu tn̄ donec picioꝛ tibi apparē poſſit et melioꝛ· rudibꝫ āmonicōibꝫ nr̄is interim eſto ꝯtenta ⁊ caritati da veniam· cuius eſt nō ꝯſiderare q̊d offerat· nec qd̄ nō hꝫ querit· ſꝫ totū qd̄ hꝫ libenter impti͛· ad cui⁹ nō tam muneris ſpēm q̄ꝫ animi reſpice volūtateꝫ· et diligent' aduꝛte quid tibi illa negare poterit· que totū dare potuit qd̄ hēbat· obtuliſſꝫ etiā qd̄ nō habebat ſi poſſꝫ· que totū potuit qd̄ habebat

Page from *De Vita Christiana.* Printed by Fust and Schoeffer without date.



Tuſcoꝝ origo·libro ſcd̄o·ca·i·¶·ad id tempus.
Tuſcoꝝ bellicoſitas·libro tercio ca·iij·¶·e truſcas.
VAna gloria·li·viij·ca·xv·p totū.
Verecundia honeſta·li·ij·c·i·¶·huius inter.
Verecundiā inferri potius eſt ꝙ damnū·libro quinto capitulo tercio·¶·igitur habeat.
Verecūdia recepta cogit hoīem ad nephāda·li·v·c.
Veneficiū·li·ij·c·i·¶·veneficij q̄ſtus ·v·¶·coriolanꝰ
Verba iocoſa·li·v·c·i·¶·eque mitis.
Veſte quidaꝫ licētius vel intempatius uſi ſūt ꝙ mos patrius daret·li·iij·ca·vi·per totum.
Virtutē eneruāt delicie ⁊ luxuria·li·ij·c·i·¶·idē ſenſit.
Virtus honore dignabilis·li·ij·c·v·p totū.
Viles genere·li·iij·ca·iiij·per totum.
Vicia·libro tercio caplo quinto per totū.
Violentia·li·ix·c·vij·per totum.
Vindicta ⁊ vltio·li·ix·c·x·per totum.
Vite amor·libro nono·c·xiij·per totū.
Vigor cultus·li·iiij·c·viij·¶·Philippo.
Victorie fructus·li·v·c·i·¶·africam.
Vincere ſeipm virtuoſū eſt·li·iiij·c·i·¶·vix.
Vſurarius laudandus·li·iiij·c·viij·¶·in quinto
Votū redditū·li·i·c·i·¶·in qua cū mater.
Vxor·li·vi·c·vij·per totum. ¶ Finit tabula.

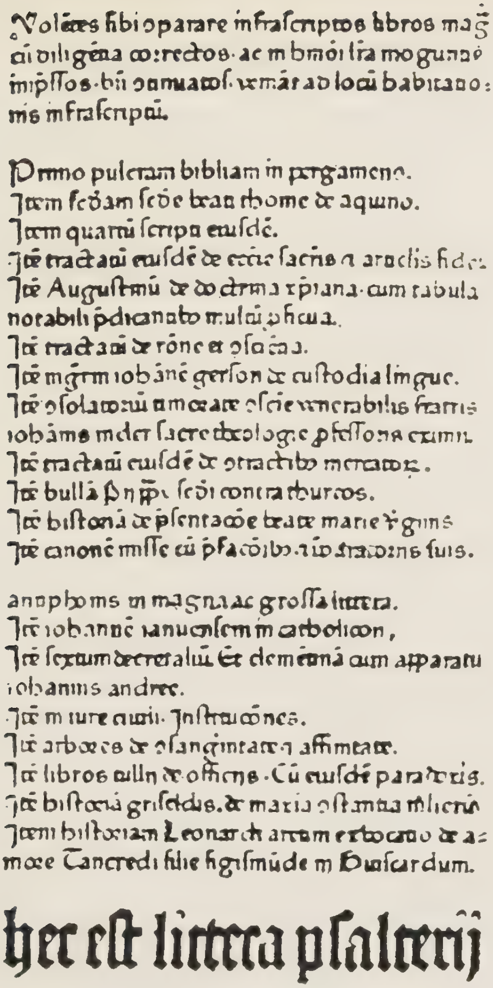
Preſens Valerij Maximi opus p̄clariſſimū/ in nobili
urbe Moguntinā Rheni/ terminatū/ anno M·cccc·lxxi·
·xviij·kalēdis iulijs/ per egregium Petrū ſchoyffer de
Gernſheym artis impſſorie mgrm/ feliciter ꝯſumatū

Page from Gaius Valerius Maximus' *Facta et Dicta Memorabilia*. Printed by Peter Schoeffer, Mainz, 1471. Shows the first printer's mark.

of 1454–55." As a printer he was responsible for a number of innovations. He introduced dating of books, printing in colors, spacing with leads between lines, and the use of marginal notes. He is also credited with having been the first to introduce Greek characters in print. He is usually spoken of as the father of type-founding. He seems to have been proud of his skill as a type-founder, for in the colophon of his *Institutes of Justinian* he says: "Every nation can now procure its own kind of letters, for he [Schoeffer] excels with all-prevailing pencil." He made lavish use of colors. As is said in the British Museum catalogue: "Down to about 1485 there is hardly a book from the press of Peter Schoeffer without some touch of red. After 1485 he used it chiefly in missals, but we find a red colophon reappearing in the *Chronik der Sachsen* of 1492."

Schoeffer continued to print until the close of the fifteenth century. Fifty-nine books are credited to him as an independent printer. In 1479 he paid a sum of money to become a citizen of Frankfort-on-the-Main, probably to enable him to go into business there. He continued to reside in Mainz, where he became a citizen of note and was honored by being made a judge.

In 1470 Peter Schoeffer issued the first bookseller's advertisement of printed books. It was also the first printed poster, and because it exhibited a line of type from one of the books, it became the first type specimen sheet. It was printed on one side of the sheet and



Volētes sibi ɔparare infrascriptos libros magnā diligētia correctos · ac in huiõi lrā moguntie impssos · bñ ɔtinuatos · veniāt ad locū habitacionis infrascriptū.

Primo pulcram bibliam in pergameno.
Item scdam scde beati thome de aquino.
Item quartū scripti eiusdē.
Itē tractatū eiusdē de ecclie sacris et articlis fidei.
Itē Augustinū de doctrina xpiana · cum tabula notabili pdicantibus multū pficua.
Itē tractatū de rōne et ɔsciēcia.
Itē mgrm iohānē gerson de custodia lingue.
Itē ɔsolatoriū timorate ɔsciē venerabilis fratris iohānis nider sacre theologie pfessoris eximii.
Itē tractatū eiusdē de ɔtractibus mercatorū.
Itē bullā pii pape scdi contra thurcos.
Itē historiā de psentacōe beate marie virginis
Itē canonē misse cū pfacōibus et ppatoriis suis.

anophonis in magna ac grossa littera.
Itē iohannē ianuensem in catholicon,
Itē sextum decretaliū Et clementinā cum apparatu iohannis andree.
Itē in iure civili · Institucōnes.
Itē arbores de ɔsanguinitate et affinitate.
Itē libros tullii de officiis · Cū eiusdē paradoxis.
Itē historiā griseldis · de maxia ɔstantia mulierū
Item historiam Leonardi aretini ex bocacio de amore Tancredi filie sigismūde in Guiscardum.

hec est littera psalterij

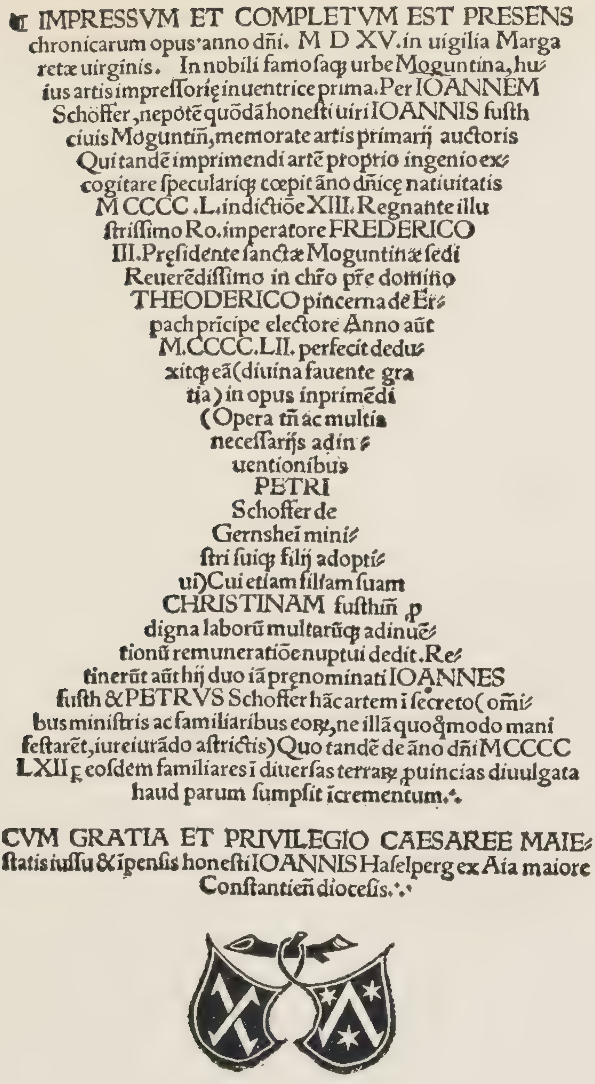
The first book advertisement and the first type specimen sheet. Printed by Peter Schoeffer, Mainz, about 1470.

listed 21 books for sale; the name of the local agent was filled in by hand at the bottom. Three of the books listed were not printed by Schoeffer but probably by Gutenberg.

Schoeffer carried on business in several towns and on a large scale. He sold not only his own publications but books issued by other German printers as well. According to Putnam, he seems also to have acted in some measure as purchasing agent for the University of Paris, through an associate, Guimier, who was a licensed member of the Paris guild. The Paris agency was later given up, and Schoeffer removed his publishing headquarters to Frankfort, which had become the publishing center of Germany, and he devoted his energies to the extension of his business throughout Europe. He continued to print books at Mainz, however.

The extent of Schoeffer's publishing business is shown by records of suits at law in various cities. One of the suits was against a certain Bernhard Inkus, of Frankfort, for violation of property rights in a series of books which were vested in Schoeffer and Conrad Henki. The extent of his business all the way from Basel to Lubeck is to be traced in the court records of those cities.

Peter Schoeffer's son John, who in his time became proprietor of the office and who continued it for many years, in a statement in a book he produced in 1515 furnished this testimony to his father's ingenuity and skill:



IMPRESSVM ET COMPLETVM EST PRESENS chronicarum opus anno dñi. M D XV. in uigilia Margaretæ uirginis. In nobili famoſaq; urbe Moguntina, huius artis impreſſorię inuentrice prima. Per IOANNEM Schöffer, nepotē quodā honeſti uiri IOANNIS fuſth ciuis Moguntiñ, memorate artis primarij auctoris Qui tandē imprimendi artē proprio ingenio excogitare ſpeculariq; cœpit āno dñicę natiuitatis M CCCC. L. indictiōe XIII. Regnante illuſtriſſimo Ro. imperatore FREDERICO III. Pręſidente ſanctæ Moguntinæ ſedi Reuerēdiſſimo in chr̄o p̄re domino THEODERICO pincerna dē Erpach prīcipe electore Anno aūt M.CCCC.LII. perfecit deduxitq; eā (diuina fauente gratia) in opus inprimēdi (Opera tñ ac multis neceſſarijs adinuentionibus PETRI Schoffer de Gernsheī miniſtri ſuiq; filij adoptiui) Cui etiam filiam ſuam CHRISTINAM fuſthiñ ꝓ digna laborū multarūq; adinuētionū remuneratiōe nuptui dedit. Retinerūt aūt hij duo iā pręnominati IOANNES fuſth & PETRVS Schoffer hāc artem ī ſecreto (omībus miniſtris ac familiaribus eoꝝ, ne illā quoq̃modo manifeſtarēt, iureiurādo aſtrictis) Quo tandē de āno dñi MCCCC LXII ꝑ eoſdem familiares ī diuerſas terraꝝ ꝓuincias diuulgata haud parum ſumpſit īcrementum.∴

CVM GRATIA ET PRIVILEGIO CAESAREE MAIEſtatis iuſſu & īpenſis honeſti IOANNIS Haſelperg ex Aia maiore Conſtantieñ dioceſis.∴

Colophon of Trithemius' *Compendium Sive Brevarium.* Printed by John Schoeffer, Mainz, 1505. It gives credit for the invention of printing to John Fust, "not without the aid and the many indispensable improvements of Peter Schoeffer."

Fust at length began by his own unaided genius to devise and experiment upon a method of printing. This, with the help of divine grace, he perfected and applied to practical purposes in the year 1452. This result, however, was not attained without the aid and the many indispensable improvements of Peter Schoeffer, of Gernsheim, his workman and adopted son, to whom, in fitting recognition of these labors and many discoveries, he also gave in marriage his daughter, Christine.

CHAPTER IV

THE FIRST "TOURIST" PRINTERS

TWO rival claimants contended for the honor of succeeding Archbishop Theodore von Erpach of Mainz when that prelate died in May, 1459. Adolph of Nassau, supported by papal edict from Rome, was successful, although he did not secure actual possession of the city until he had sacked it and expelled all male inhabitants capable of bearing arms. This meant, of course, a dispersal of the printers who had learned the new art under the tutelage of Gutenberg, Fust, and Schoeffer.

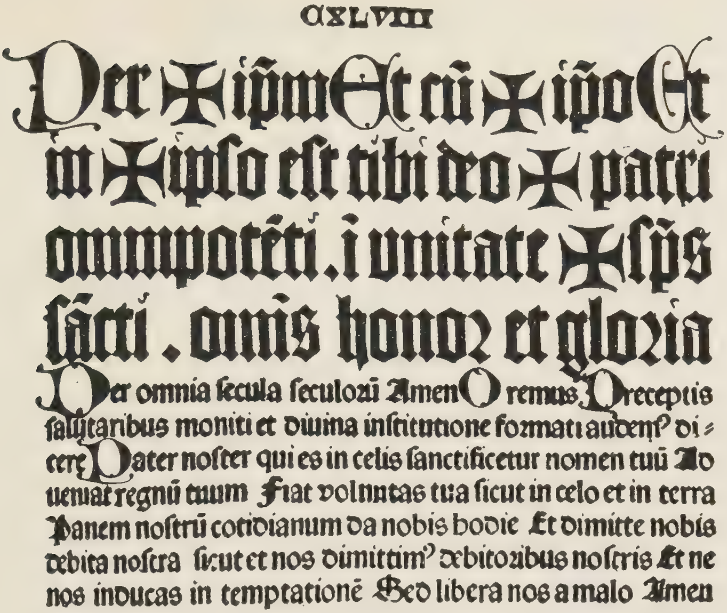
Transportation in the fifteenth century was confined almost entirely to the water routes. Mainz is situated on the Rhine River at its confluence with the Main, and three important cities about equally distant from Mainz in various directions as the crow flies and easily reached by water are Bamberg, due east on the River Regnitz, just above where it joins the Main; Strasbourg, due south up the Rhine; and Cologne, down the Rhine to the northwest.

To these three cities went the exiled printers with their outfits. Of the three, Bamberg and Strasbourg both claim the honor of being second to Mainz as the scene of early printing; the date in each case is somewhat shrouded in doubt, and it is possible that printing was done at both prior to the exodus from Mainz.

Albert Pfister was Bamberg's first printer, but he may have printed at other places before settling in Bamberg. It was common for the early printers, following the custom of other fifteenth-century craftsmen—jewelers, gem-setters, engravers, etc.—not only immediately after the dispersal at Mainz but through later years, to wander from place to place with their small stocks of types and materials, setting up in a town or in a neighboring monastery as opportunity to ply their trade seemed to offer. The monks were not opposed to printing, as has sometimes been contended. The books of the first thirty years after the invention of the art were produced chiefly under the patronage of the monasteries and for the use of the monks and the secular clerics.

Pfister is sometimes mentioned as a partner of John Gutenberg at Mainz. The famous 36-Line Bible has been called the "Pfister Bible" because of the supposed share of Pfister in its production; indeed, he is credited by some bibliographers with being its sole printer, a theory which, as is pointed out by Duff, "a short examination of the workmanship of his signed books would go far to upset." Pfister did not attain high rank as a printer. He used the type of the 36-Line Bible in printing other books, and it was the only type he used.

Pfister is thought to have been an engraver and possibly a xylographic printer before becoming a worker with type. He was the first printer to introduce woodcut illustrations in text matter. He was



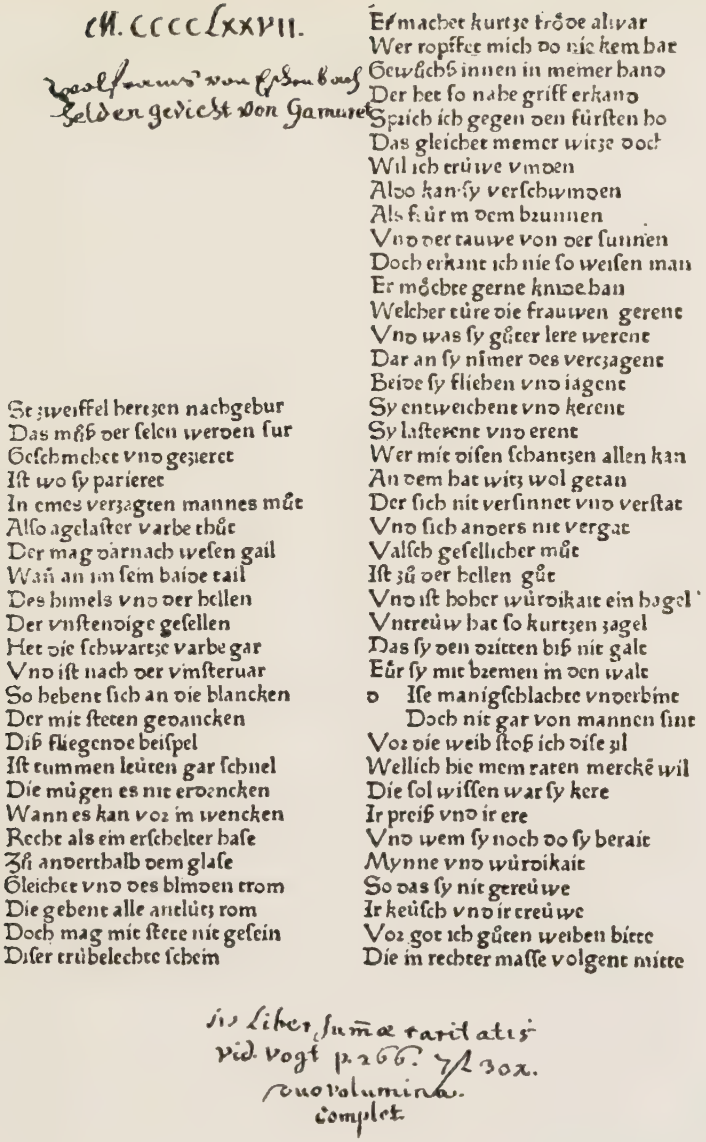
CXLVIII

Per ✠ ip̄ſm Et cū ✠ ip̄ſo Et
in ✠ ipſo eſt tibi deo ✠ patri
omnipotēti . i unitate ✠ ſpūs
ſācti . omnis honoꝛ et gloꝛia
Per omnia ſecula ſeculoꝛū Amen Oremus Preceptis
ſalutaribus moniti et diuina inſtitutione foꝛmati audemꝰ di-
cere Pater noſter qui es in celis ſanctificetur nomen tuū Ad-
ueniat regnū tuum Fiat voluntas tua ſicut in celo et in terra
Panem noſtrū cotidianum da nobis hodie Et dimitte nobis
debita noſtra ſicut et nos dimittimꝰ debitoꝛibus noſtris Et ne
nos inducas in temptationē Sed libera nos a malo Amen

First page of the Bamberg Missal. Printed by John Sensenschmidt, Bamberg, 1481 careless about identifying his name and the dates of production with his books, but nine typographic books can be accredited to him with safety, seven of which were illustrated with woodcuts. Only two are dated, one being Boner's *Edelstein*, a collection of old German fables, printed in 1461, a small folio of 28 leaves crowded with 101 illustrations. The other book to bear a date, 1462, is *A History of Joseph, Daniel, Esther, and Judith.* It contains 55 illustrations, six of which were printed twice, making 61 in all.

Pfister issued three editions of the *Biblia Pauperum*, two in German and one in Latin, each with seventeen printed leaves. The page engravings were made in five different sections closely joined. He printed also a second edition of the *Edelstein* without date. Pfister's *Complaint of the Widower against Death* contains 24 leaves with five full-page cuts, larger and bolder than the engravings in his other books but of about the same rude quality. Pollard believes the *Complaint* to have been printed previously to either of Pfister's dated books.

The engraving of Pfister's illustrations was poorly done because the skilled wood-engravers would do no work for him. They saw in the new art of printing a menace to their own industry, which was the production of engravings for the block-book printers, and they declared a boycott against it. Pfister was therefore obliged to do his own engraving or to employ amateur engravers, and the quality of his illustrations accordingly suffered.



M.CCCCLXXVII.

Wolframus von Eschenbach
Helden gedicht von Gamuret

Se zweiffel hertzen nachgebur
Das můß der ſelen werden ſur
Geſchmehet vnd gezieret
Iſt wo ſy parieret
In eines verzagten mannes můt
Alſo agelaſter varbe thůt
Der mag darnach weſen gail
Wañ an im ſein baide tail
Des himels vnd der hellen
Der vnſtendige geſellen
Het die ſchwartze varbe gar
Vnd iſt nach der vinſteruar
So hebent ſich an die blancken
Der mit ſteten gedancken
Diß fliegende beiſpel
Iſt tummen leüten gar ſchnel
Die mügen es nit erdencken
Wann es kan vor im wencken
Recht als ein erſchelter haſe
Zů anderthalb dem glaſe
Gleichet vnd des blinden trom
Die gebent alle antlütz rom
Doch mag mit ſtete nit geſein
Diſer trübelechte ſchein

Er machet kurtze fröde alwar
Wer ropffet mich do nie kein har
Gewachß innen in meiner hand
Der het ſo nahe griff erkand
Sprich ich gegen den fürſten ho
Das gleichet meiner witze doch
Wil ich trüwe vinden
Also kan ſy verſchwinden
Als für in dem brunnen
Vnd der tauwe von der ſunnen
Doch erkant ich nie ſo weiſen man
Er möchte gerne kunde han
Welcher türe die frauwen gerent
Vnd was ſy gůter lere werent
Dar an ſy nīmer des verczagent
Beide ſy fliehen vnd iagent
Sy entweichent vnd kerent
Sy laſterent vnd erent
Wer mit diſen ſchantzen allen kan
An dem hat witz wol getan
Der ſich nit verſinnet vnd verſtat
Vnd ſich anders nit vergat
Valſch geſellicher můt
Iſt zů der hellen gůt
Vnd iſt hoher würdikait ein hagel
Vntreüw hat ſo kurtzen zagel
Das ſy den dritten biß nit galt
Für ſy mit bremen in den walt
d Iſe manigſchlachte vnderbint
Doch nit gar von mannen ſint
Vor die weib ſtoß ich diſe zil
Wellich hie mein raten merckē wil
Die ſol wiſſen war ſy kere
Ir preiß vnd ir ere
Vnd wem ſy noch do ſy berait
Mynne vnd würdikait
So das ſy nit gereüwe
Ir keüſch vnd ir treüwe
Vor got ich gůten weiben bitte
Die in rechter maſſe volgent mitte

iss liber summae raritatis
vid. Vogt p. 266. 7l 30x.
duo volumina.
complet

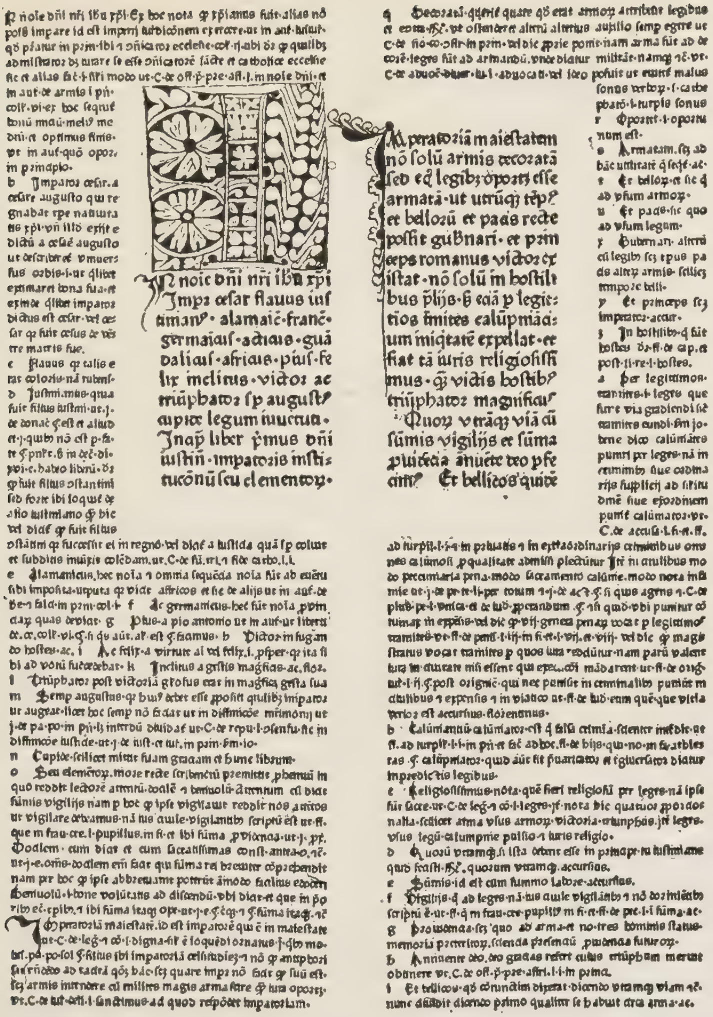
Page from first edition of Wolfram von Eschenbach's *Parsival.* Printed by John Mentelin, Strasbourg, 1477.

After Albert Pfister the best-known name connected with the annals of printing in Bamberg is that of John Sensenschmidt (John the Typecutter), who arrived there from Nuremberg in 1481, about twenty years after Pfister had ceased operations, Bamberg in the interim having been without a printer. Part of the time Sensenschmidt printed alone and at other times with partners, among them Heinrich Detzensteiner, who in his turn operated with other partners. Sensenschmidt was the printer of the well-known Bamberg Missal, a noble work which rivaled Peter Schoeffer's famous Psalter and, indeed, in some respects may be said to be its superior.

Among the other printers of Bamberg were Hans Storer and Marx Ayrer, two wandering printers who at various times set up printing establishments in at least three other German towns, Regensburg, Ingolstadt, and Erfurt.

Strasbourg was an important publishing center early in the fifteenth century, and naturally it became important as a center of printing also. Several great printing houses sprang up. One was that headed by John Mentel or Mentelin. Although Mentelin's first dated book was issued in 1469, we have testimony by John Philip de Lignamine of Rome in his "Chronicle" of 1474 to the effect that as early as 1458 Mentelin was "printing three hundred sheets a day."

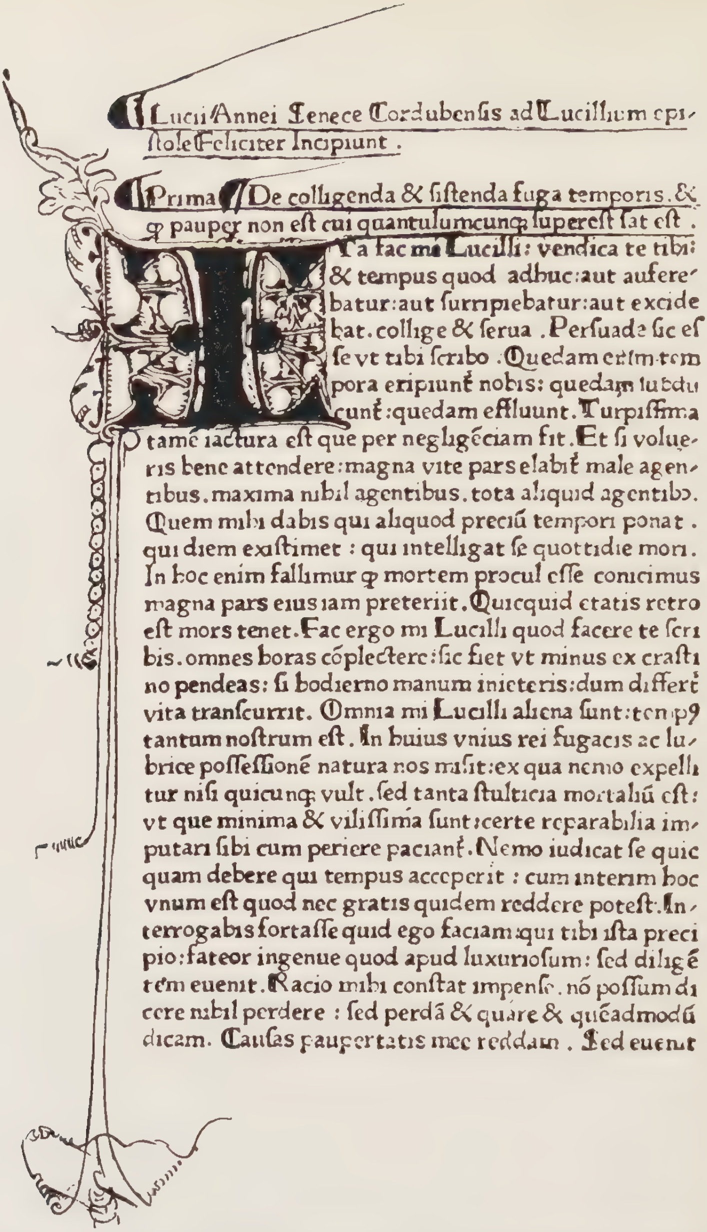
Mentelin devoted himself to German theological works, leaving it to his competitors, as Bernard says, to "ruin themselves in reproducing the Latin



In noīe dn̄i nr̄i ih̄u xp̄i Impr̄ ceſar flauus iuſtinian⁹ · alamaīc · francī · germaīcuſ · achaicus · guādalicuſ · africus · piuſ · felix inclitus · victor ac triūphator ſp auguſt⁹ cupiēte legum iuuentute · Incip̄ liber p̄mus dn̄i iuſtin̄ · imperatoris inſtitucōnū ſeu elementoꝝ ·

Imperatoriā maieſtatem nō ſolū armis decoratā ſed eciā legibꝫ oportꝫ eſſe armatā · ut utrūqꝫ temp⁹ et belloꝝ et pacis recte poſſit gubnari · et princeps romanus victor exiſtat · nō ſolū in hoſtilibus p̄lijs · ſ; eciā p legitimos tramites calūpniāciū iniqtatē expellat · et fiat tā iuris religioſiſſimus · q̄ʒ victis hoſtib⁹ triūphator magnific⁹. Quoꝝ utrāqꝫ viā cū ſūmis vigilijs et ſūma puidēcia annuēte deo pfecim⁹. Et bellicos quidē

Page from Justinian's *Institutiones*. Printed by Heinrich Eggestein, Strasbourg, 1472.



¶ Lucii Annei Senece Cordubenſis ad Lucillium epiſtole ¶ Feliciter Incipiunt .

¶ Prima ¶ De colligenda & ſiſtenda fuga temporis. & ꝙ pauper non eſt cui quantulumcunq; supereſt ſat eſt .

Ita fac mi Lucilli: vendica te tibi: & tempus quod adhuc: aut auferebatur: aut ſurripiebatur: aut excidebat. collige & ſerua . Perſuade ſic eſſe vt tibi ſcribo . Quedam enim tempora eripiunt̄ nobis: quedam ſubducunt̄: quedam effluunt. Turpiſſima tamē iactura eſt que per negligēciam fit. Et ſi volueris bene attendere: magna vite pars elabit̄ male agentibus. maxima nihil agentibus. tota aliquid agentibꝰ. Quem mihi dabis qui aliquod preciū tempori ponat . qui diem exiſtimet : qui intelligat ſe quottidie mori. In hoc enim fallimur ꝙ mortem procul eſſe conicimus magna pars eius iam preteriit. Quicquid etatis retro eſt mors tenet. Fac ergo mi Lucilli quod facere te ſcribis. omnes horas cōplectere: ſic fiet vt minus ex craſtino pendeas: ſi hodierno manum inieceris: dum differt̄ vita tranſcurrit. Omnia mi Lucilli aliena ſunt: tempꝰ tantum noſtrum eſt. In huius vnius rei fugacis ac lubrice poſſeſſionē natura nos miſit: ex qua nemo expellitur niſi quicunq; vult. ſed tanta ſtulticia mortaliū eſt: vt que minima & viliſſima ſunt: certe reparabilia imputari ſibi cum periere paciant̄. Nemo iudicat ſe quicquam debere qui tempus acceperit : cum interim hoc vnum eſt quod nec gratis quidem reddere poteſt. Interrogabis fortaſſe quid ego faciam: qui tibi iſta precipio: fateor ingenue quod apud luxurioſum: ſed diligētem euenit. Racio mihi conſtat impenſe. nō poſſum dicere nihil perdere : ſed perdā & quare & quēadmodū dicam. Cauſas paupertatis mee reddam . Sed euenit

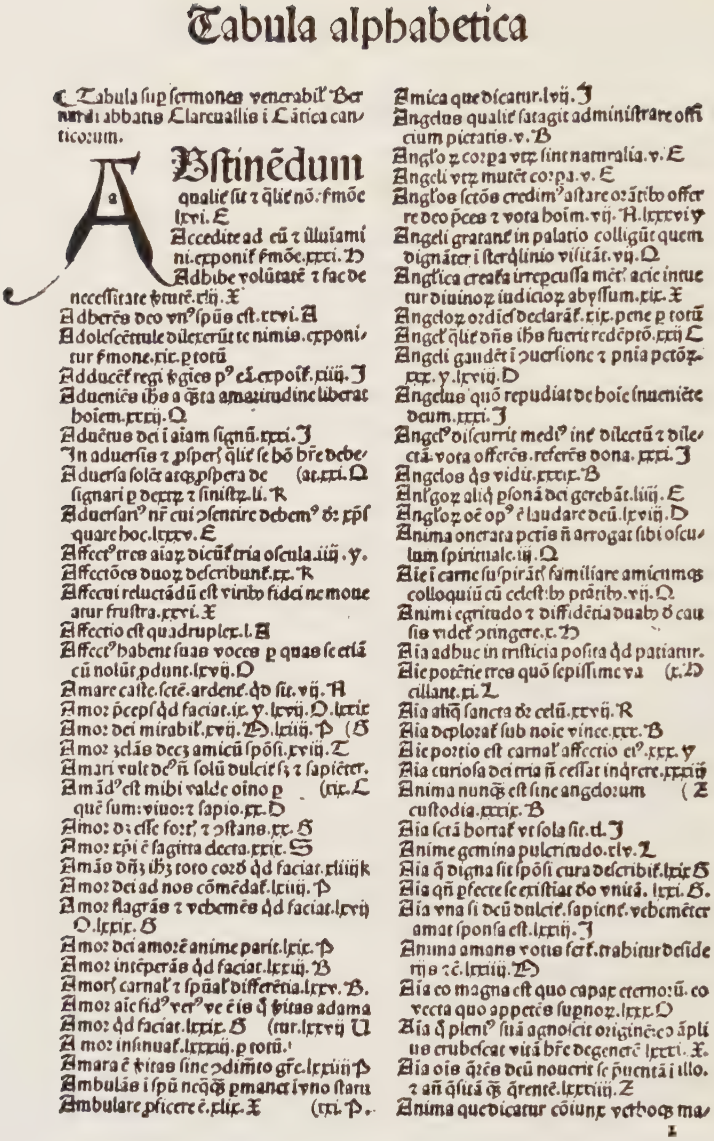
Page from a book printed by Adolph Rusch of Strasbourg, showing the famous capital "R."

classics, the taste for which before the close of the fifteenth century was not sufficiently developed to insure a remunerative sale." He printed the first Bible in German, the date being about 1466. Some of his works were of considerable importance, the *Specula* of St. Vincent of Beauvais, issued in 1473, being in eight folio volumes. He was the first German printer to use a Roman type face and the first to print extensive descriptive catalogues of his books. On his catalogues he left a blank space for the insertion of the name of the local agent, with instructions to apply to the address given for the books listed.

Martin Schott, who married one of Mentelin's daughters, is said to have belonged to a patrician family. His earliest dated book was a *Plenarium*, or collection of epistles and gospels, completed October 4, 1481. Thirty-five books, mostly devotional and educational, are ascribed to him.

It was claimed in 1520 by John Schott, son and successor of Martin Schott and grandson of Mentelin, that the latter was the inventor of printing from movable types. Mentelin died in 1478 and was buried in the great Strasbourg Cathedral, where a tablet to his memory was erected. The legend, for such it was, was revived in the seventeenth century by James Mentel, a Paris physician, who published two little books on the history of printing.

Heinrich Eggestein was John Mentelin's principal Strasbourg rival as printer and publisher. He issued three editions of the Bible in Latin. About fifty works



Tabula alphabetica

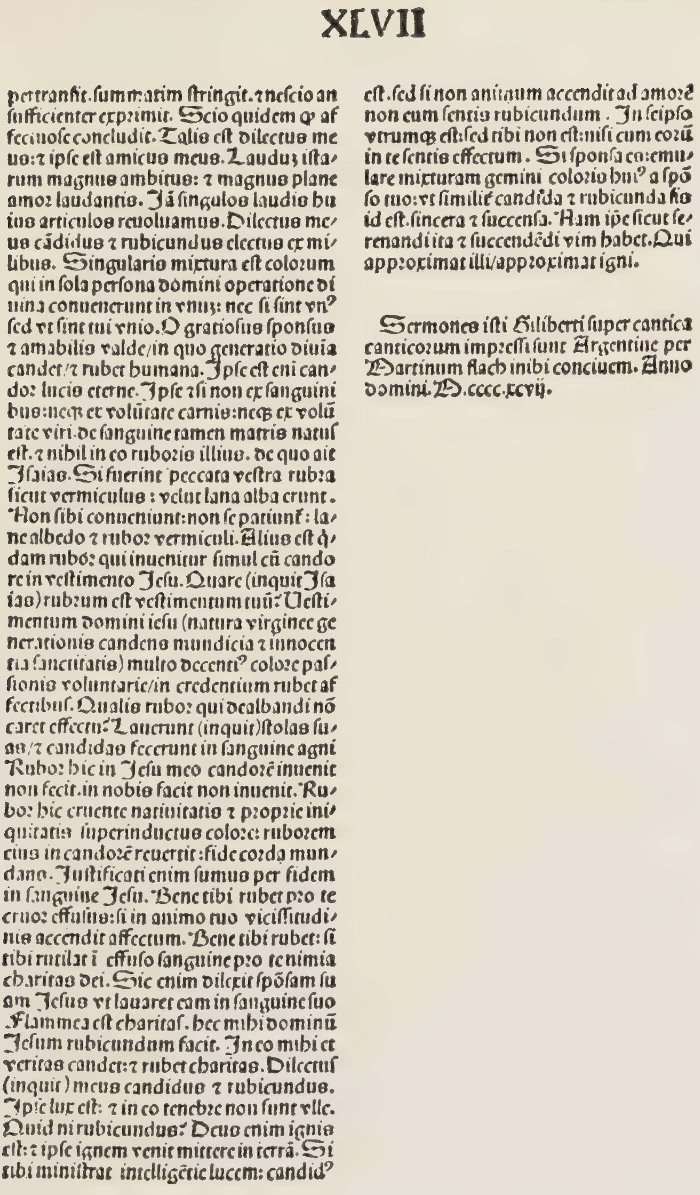
Tabula ſup ſermones venerabil' Bernardi abbatis Clareuallis i Cātica canticorum.

ABſtinēdum qualit' ſit z q̄lit' nō: ſmōe lxvi. E
Accedite ad eū z illuiamini. exponit' ſmōe.xxxi. D
Adbibe volūtatē z fac de neceſſitate ꝟtutē.xlij. X
Adberēs deo vn⁹ ſpūs eſt.xxvi. A
Adoleſcētule dilexerūt te nimis. exponitur ſmone.xix. p totū
Adducēt regi ꝟgies p⁹ eā.expoit'.xiiij. J
Aduenies ihs a q̄ta amaritudine liberat boiem.xxxij. Q
Aduētus dei i aiam ſignū.xxxi. J
In aduerſis z pſperiſ q̄lit' ſe bō bre debe(at.xxi. Q
Aduerſa ſolēt atq; pſpera de ſignari p dextrā z ſiniſtrā.li. R
Aduerſari⁹ nr̄ cui ꝯſentire debem⁹ ē: xpi quare hoc.lxxxv. E
Affect⁹ tres aiaꝝ dicūt' tria oſcula.iiij. y.
Affectōes duoꝝ deſcribunt'.xx. R
Affecui relictādū eſt viribꝫ fidei ne moueatur fruſtra.xxvi. X
Affectio eſt quadruplex.l. A
Affect⁹ habent ſuas voces p quas ſe etiā cū nolūt pdunt.lxvij. D
Amare caſte.ſctē.ardent'.qd ſit.vij. A
Amor ꝑcepſ q̄d faciat.ix. y.lxvij. D.lxxix
Amor dei mirabil'.xvij. D.lxiiij. P (G
Amor ꝯdās decꝫ amicū ſpōſi.xviij. T
Amari vult de⁹ n̄ ſolū dulcit' ſꝫ z ſapiēter.
Am ād⁹ eſt mihi valde oino p (xix. L
quē ſum: viuo: z ſapio.xx. D
Amor dꝫ eſſe fort' z ꝯſtans.xx. G
Amor xpi ē ſagitta electa.xxix. S
Amās dn̄ꝫ ihꝫ toto cord q̄d faciat.xliiij. k
Amor dei ad nos cōmēdat'.lxiiij. P
Amor flagrās z vehemēs q̄d faciat.lxvij D.lxxix. G
Amor dei amorē anime parit.lxix. P
Amor intēperās q̄d faciat.lxxiij. B
Amoris carnal' z ſpūal' differētia.lxxv. B.
Amor aic fid⁹ ver⁹ vē ē is q̄ ꝟitas adama(tur.lxxvij V
Amor q̄d faciat.lxxix. G
Amor inſinuat'.lxxxiij. p totū.
Amara ē ꝟitas ſine ꝯdimēto grē.lxxiiij P
Ambulās i ſpū neq̄q̄ ꝑmanet i vno ſtatu (xxi. P.
Ambulare pficere ē.xlix. X

Amica que dicatur.lvij. J
Angelus qualit' ſatagit adminiſtrare officium pietatis.v. B
Angl'oꝝ corpa vtrū ſint naturalia.v. E
Angeli vtrū mutēt corpa.v. E
Angl'os ſctōs credim⁹ aſtare orātibꝫ offerre deo ꝑces z vota boim.vij. H.lxxxvi y
Angeli gratant' in palatio colligūt quem dignāter i ſterq̄linio viſitāt.vij. Q
Angl'ica creat'a irreꝑcuſſa mēt' acie intuetur diuinoꝝ iudicioꝝ abyſſum.xix. X
Angeloꝝ ordies declarāt'.xix. pene p totū
Angel' q̄lit' dn̄s ihs fuerit redēptō.xxij L
Angeli gaudēt i ꝯuerſione z pnia pctōꝝ.xxx. y.lxviij. D
Angelus quō repudiat de boie inueniēte deum.xxxi. J
Angel⁹ diſcurrit medi⁹ int' dilectū z dilectā: vota offerēs. referēs dona. xxxi. J
Angelos q̄s vidit.xxxix. B
Anl'goꝝ aliq̄ pſonā dei gerebāt.liiij. E
Angl'oꝝ oē op⁹ ē laudare deū.lxviij. D
Anima onerata pctis n̄ arrogat ſibi oſculum ſpirituale.iij. Q
Aie i carne ſuſpirātis familiare amicitiaq; colloquiū cū celeſtibꝫ p̄ntibꝫ.vij. Q
Animi egritudo z diffidētia duabꝫ ō cauſis videt' ꝯtingere.x. D
Aia adhuc in triſticia poſita q̄d patiatur.
Aie potētie tres quō ſepiſſime va(x. D
cillant.xi. L
Aia aliq̄ ſancta ē celū.xxvij. R
Aia deplorat' ſub noie vinee.xxx. B
Aie portio eſt carnal' affectio ei⁹.xxx. y
Aia curioſa dei tria n̄ ceſſat inq̄rere.xxxiij
Anima nunq̄ eſt ſine angelorum (Z
cuſtodia.xxxix. B
Aia ſctā hortat' vt ſola ſit.xl. J
Anime gemina pulcritudo.xlv. L
Aia q̄ digna ſit ſpōſi cura deſcribit'.lxix G
Aia qñ pfecte ſe exiſtiat deo vnitā. lxxi. G.
Aia vna ſi deū dulcit'.ſapient'.vehemēter amat ſponſa eſt.lxxiij. J
Anima amans votis fert'.trahitur deſiderijs zc.lxxiiij. D
Aia eo magna eſt quo capax eternorū. eo recta quo appetēs ſupnoꝝ.lxxx. D
Aia q̄ pleni⁹ ſuā agnoſcit originē: eo āplius erubeſcat vitā hr̄e degenerē lxxxi. X.
Aia ois q̄rēs deū nouerit ſe ꝑuentā i illo. z añ q̄ſitā q̄ q̄rentē.lxxxiiij. Z
Anima que dicatur cōiunx verbiq; ma-

a

First page of Bernard's *Sermons*. Printed by Martin Flach, Strasbourg, 1497.



XLVII

pertranſit. ſummatim ſtringit. ⁊ neſcio an ſufficienter exprimit. Scio quidem ꝙ affectuoſe concludit. Talis eſt dilectus meus: ⁊ ipſe eſt amicus meus. Laudū iſtarum magnus ambitus: ⁊ magnus plane amoꝛ laudantis. Iā ſingulos laudis huius articulos reuoluamus. Dilectus meus cādidus ⁊ rubicundus electus ex milibus. Singularis mixtura eſt coloꝛum qui in ſola perſona domini operatione diuina conuenerunt in vnū: nec ſi ſint vnꝰ ſed vt ſint tui vnio. O gratioſus ſponſus ⁊ amabilis valde/in quo generatio diuina candet/⁊ rubet humana. Ipſe eſt enī candoꝛ lucis eterne. Ipſe ⁊ ſi non ex ſanguinibus: neqꝫ ex volūtate carnis: neqꝫ ex volūtate viri. de ſanguine tamen matris natuſ eſt. ⁊ nihil in eo ruboꝛis illius. de quo ait Iſaias. Si fuerint peccata veſtra rubꝛa ſicut vermiculus: velut lana alba erunt. Non ſibi conueniunt: non ſe patiunt: lane albedo ⁊ ruboꝛ vermiculi. Alius eſt ꝗdam ruboꝛ qui inuenitur ſimul cū candoꝛe in veſtimento Ieſu. Quare (inquit Iſaias) rubꝛum eſt veſtimentum tuū? Veſtimentum domini ieſu (natura virginee generationis candens mundicia ⁊ innocentia ſanctitatis) multo decentiꝰ coloꝛe paſſionis voluntarie/in credentium rubet affectibuſ. Qualis ruboꝛ qui dealbandi nō caret effectu? Lauerunt (inquit) ſtolas ſuas/⁊ candidas fecerunt in ſanguine agni. Ruboꝛ hic in Ieſu meo candoꝛē inuenit non fecit. in nobis facit non inuenit. Ruboꝛ hic cruente natiuitatis ⁊ pꝛopꝛie iniquitatis ſuperinductus coloꝛe: ruboꝛem eius in candoꝛē reuertit: fide coꝛda mundans. Iuſtificati enim ſumus per fidem in ſanguine Ieſu. Bene tibi rubet pꝛo te cruoꝛ effuſus: ſi in animo tuo viciſſitudinis accendit affectum. Bene tibi rubet: ſi tibi rutilat ī effuſo ſanguine pꝛo te nimia charitas dei. Sic enim dilexit ſpōſam ſuam Ieſus vt lauaret eam in ſanguine ſuo. Flammea eſt charitaſ. hec mihi dominū Ieſum rubicundum facit. In eo mihi et veritas candet: ⁊ rubet charitas. Dilectuſ (inquit) meus candidus ⁊ rubicundus. Ipſe lux eſt: ⁊ in eo tenebꝛe non ſunt vlle. Quid ni rubicundus? Deus enim ignis eſt: ⁊ ipſe ignem venit mittere in terrā. Si tibi miniſtrat intelligētie lucem: candidꝰ eſt. ſed ſi non animum accendit ad amoꝛē non eum ſentis rubicundum. In ſeipſo vtrumqꝫ eſt: ſed tibi non eſt: niſi cum coꝛū in te ſentis effectum. Si ſponſa coꝛemulare mixturam gemini coloꝛis huiꝰ a ſpōſo tuo: vt ſimiliſ candida ⁊ rubicunda ſis id eſt. ſincera ⁊ ſucceneſa. Nam ipē ſicut ſerenandi ita ⁊ ſuccendēdi vim habet. Qui appꝛoximat illi/appꝛoximat igni.

Sermones iſti Giliberti ſuper cantica canticoꝛum impꝛeſſi ſunt Argentine per Martinum flach inibi conciuem. Anno domini. M.cccc.xcvij.

Last page, containing colophon, of Flach's edition of Bernard's *Sermons.*

have been credited to him. He was a man of scholarly training, having received a university degree.

The most interesting printer in Strasbourg from the bibliographical point of view was Adolph Rusch, or, as he was for a long time known, the "R Printer." Rusch was John Mentelin's son-in-law, having married his daughter Salome. They were associated in business during Mentelin's lifetime, and Rusch succeeded to it on the elder partner's death in 1479. Part of the books now definitely credited to Rusch were for a long time assigned anonymously under the title of the "R Printer" because of the use in his work of a peculiarly shaped capital "R." Rusch not only did a large business as printer, publisher, and bookseller, but he also dealt on a considerable scale in paper, supplying it to other printers in Strasbourg, Nuremberg, Basel, and elsewhere. He printed a magnificent edition of the Bible in Latin, in four volumes, for Anthony Koberger of Nuremberg.

Rusch was succeeded in business by Martin Flach, who was engaged in printing in Strasbourg, presumably as a workman, as early as 1472. Hain registers ten unsigned books, dated 1475 to 1483, as Flach's, but the attribution is not now regarded as correct. Flach died in 1500. He had a namesake in Basel who was a printer there in 1475.

George Husner began to print in Strasbourg in 1476 and continued until 1498. His types may be recognized by the capital "H," which is Roman and has a boss on the lower side of the crossbar.

John Reinhard, or John Grüninger, as he is sometimes known from his birthplace, was a Strasbourg printer of distinction. He specialized in illustrated books with elaborately ornamented pages and of a popular literary flavor, producing 148 in all, the first being dated 1496. Of these, a hundred were printed before 1500, and twenty different type faces appeared in them. Reinhard's type faces were extensively copied by printers in other towns. He is chronicled by Putnam as the only publisher in Strasbourg who, after the Reformation was in full development, continued to print Catholic tracts and pamphlets. An instance of the considerable scale of his operations is given in the sale in 1502 to John Schönsperger of Augsburg of a thousand copies of the *Lives of the Saints*. Reinhard also printed for Koberger of Nuremberg.

Some interesting correspondence between Reinhard, Koberger, and an author named Pirckheimer has been preserved, as recorded by Putnam. Pirckheimer found frequent cause for dissatisfaction, and at one point he says that "if he could have foreseen all the difficulties that he was to experience in securing a correct printing for his volume, he would have burned the manuscript rather than have put it to press." Reinhard replied that the manuscript had not been carefully prepared.

John Prüss the elder, another Strasbourg printer, was born at Württemberg in 1447. His earliest dated book appeared in 1483. He printed eighty to ninety editions at Strasbourg before 1500 and continued until 1511, being succeeded by a son of the same name who printed until 1546.

The names of many of the Strasbourg printers are unknown. Among others whose identity has been established are Thomas Anshelm, Matthias Brant, Jacob Eber, Matthias Hupfuff, Bartholomaeus Kistler, Heinrich Knoblochtzer, and Wilhelm Schaffener.

CHAPTER V

AUGSBURG, THE MOST INTERESTING FIFTEENTH-CENTURY PRINTING CENTER

AUGSBURG is best known in history through the famous "Augsburg Confession," which associates it with Martin Luther and the beginnings of Protestantism. The city was founded before the opening of the Christian era and rose to a position of importance during the Middle Ages. It is situated on the eastern slope of the continental divide that causes the waters of the Rhine to flow northwest to the Atlantic and those of the Danube southward to the Black Sea. The merchants of Augsburg at one time traded on an extensive scale with markets as far away as Africa and Asia. Although an inland town, the discovery of a water route to Asia around the Cape of Good Hope and of a path across the Atlantic to the New World had an injurious effect upon the city, and its fortunes subsequently declined.

"With Augsburg," says Pollard, "we reach on the whole the most interesting printing center in Germany. . . . That a book was printed at Augsburg is almost a guarantee that, with a little sympathy, it will still be found readable. Its vernacular output rivals in quality and quantity that of all the rest of Germany, while much of it is enriched with delightful woodcuts, which were largely copied not only in other German towns but far beyond the limits of Germany."

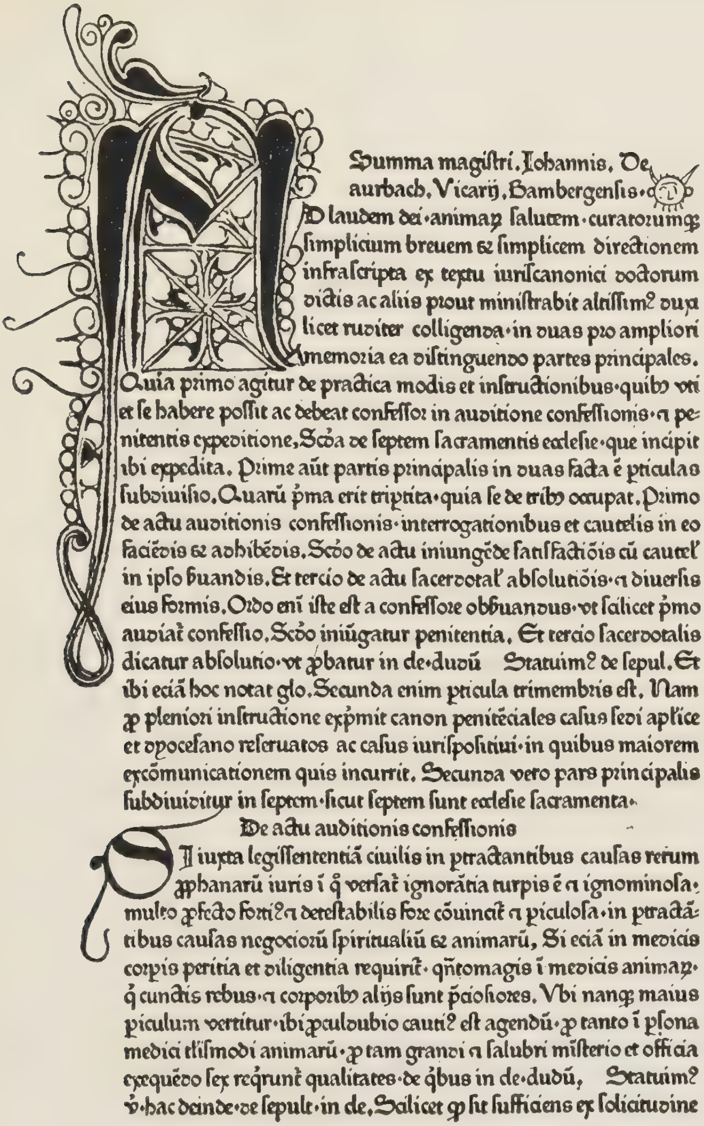
The first printer to ply his craft at Augsburg was Günther Zainer of Reutlingen, who printed there for ten years beginning March, 1468. Zainer's first book at Augsburg was *Meditationes Vitae Christi.*

Zainer used woodcuts in a book entitled *Belial*, published in 1472. He has a place in history also as the first printer to engage in a controversy with engravers, an account of which will be found in a later chapter.

Zainer set the fashion of using large initial letters, often in outline, which relieved the monotony of the pages and which, when in outline, it was expected would be filled in by a rubricator. A book printed by him in 1473, *De Regimine Principum*, however, is provided with printed headlines, chapter headings, paragraph marks, and large and small initial letters, requiring no work by a rubricator to make it complete. Zainer issued in 1474 an advertisement of fifteen of his books, and two years later another advertisement of eighteen books.

The first classified book catalogue printed in Germany was issued about this time by George Willer, an Augsburg bookseller, who sold not only his own publications but those of other German publishers.

John Schüssler is the name of an Augsburg printer who produced a number of important books in a short period from 1470 to 1473. He used a type face similar to one of Zainer's, the type being probably obtained



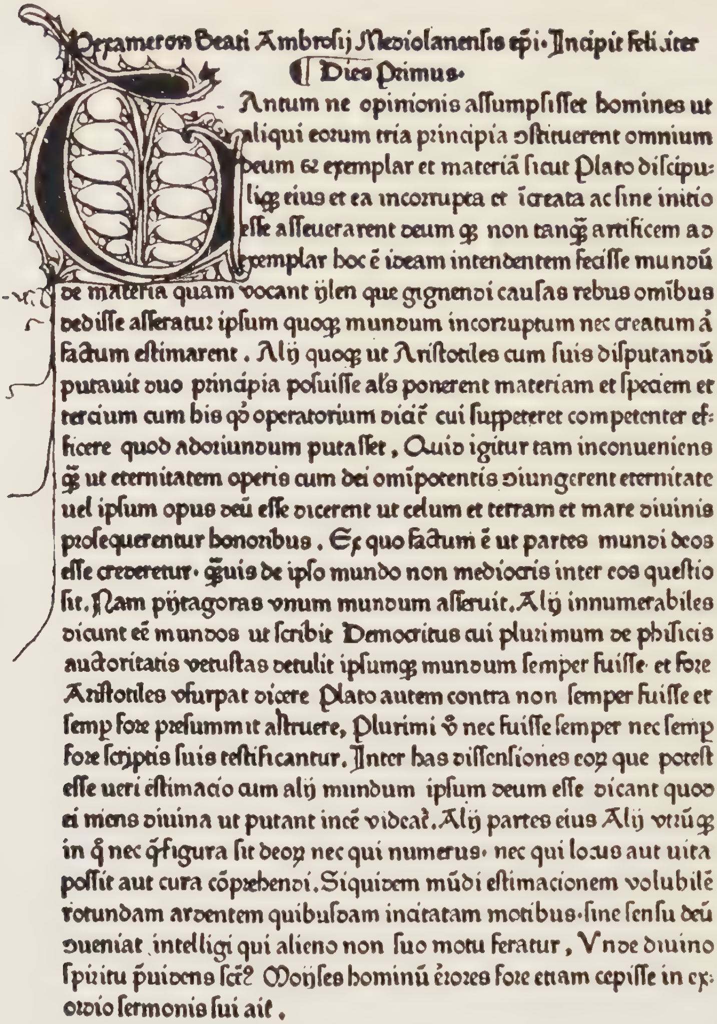
Summa magiſtri. Iohannis. De
aurbach. Vicarij. Bambergenſis.

D laudem dei · animaꝝ ſalutem · curatorumqꝫ ſimplicium breuem ⁊ ſimplicem directionem infraſcripta ex textu iuriſcanonici doctorum dictis ac aliis prout miniſtrabit altiſſimꝰ dup̄licet ruditer colligenda · in duas pro ampliori memoria ea diſtinguendo partes principales. Quia primo agitur de practica modis et inſtructionibus · quibꝰ uti et ſe habere poſſit ac debeat confeſſor in auditione confeſſionis · ⁊ penitentis expeditione, Scđa de ſeptem ſacramentis eccleſie · que incipit ibi expedita. Prime aũt partis principalis in duas facta ē ꝑticulas ſubdiuiſio. Quarũ ꝑma erit triꝑtita · quia ſe de tribꝰ occupat. Primo de actu auditionis confeſſionis · interrogationibus et cautelis in eo faciẽdis ⁊ adhibẽdis. Scđo de actu iniungẽde ſatiſfactiõis cũ cautel' in ipſo ſuandis. Et tercio de actu ſacerdotal' abſolutiõis · ⁊ diuerſis eius formis. Ordo enĩ iſte eſt a confeſſore obſuandus · vt ſcilicet ꝑmo audiatᷣ confeſſio. Scđo iniũgatur penitentia. Et tercio ſacerdotalis dicatur abſolutio · vt ꝓbatur in de · duoũ Statuimꝰ de ſepul. Et ibi eciã hoc notat glo. Secunda enim ꝑticula trimembris eſt. Nam ꝓ pleniori inſtructione exꝑmit canon penitẽciales caſus ſedi apl'ice et dyoceſano reſeruatos ac caſus iuriſpoſitiui · in quibus maiorem excõmunicationem quis incurrit. Secunda vero pars principalis ſubdiuiditur in ſeptem · ſicut ſeptem ſunt eccleſie ſacramenta ·

De actu auditionis confeſſionis

SI iuxta legiſſententiã ciuilis in ptractantibus cauſas rerum ꝓphanarũ iuris ĩ q̃ verſatᷣ ignorãtia turpis ē ⁊ ignominoſa · multo ꝓfecto fortiꝰ ⁊ deteſtabilis fore cõuincitᷣ ⁊ ꝑiculoſa · in ptractãtibus cauſas negociorũ ſpiritualiũ ⁊ animarũ, Si eciã in medicis corꝑis peritia et diligentia requiritᷣ · qñtomagis ĩ medicis animaꝝ · q̃ cunctis rebus · ⁊ corporibꝰ alijs ſunt ꝑcioſiores. Vbi nanqꝫ maius ꝑiculum vertitur · ibi ꝓculdubio cautiꝰ eſt agendũ · ꝓ tanto ĩ ꝑſona medici tl'iſmodi animarũ · ꝓ tam grandi ⁊ ſalubri miſterio et officia exequẽdo ſex reqͥrunt qualitates · de q̇bus in de · dudũ, Statuimꝰ ꝟ · hac deinde · de ſepult · in de, Scilicet ꝙ ſit ſufficiens ex ſolicitudine

First page of *Summa de Sacramentis*. Printed by Günther Zainer, Augsburg, 1469.



Hexameron Beati Ambroſij Mediolanenſis epi· Incipit feliciter

¶ Dies Primus·

TAntum ne opinionis aſſumpſiſſet homines ut aliqui eorum tria principia cõſtituerent omnium deum & exemplar et materiã ſicut Plato diſcipuliq̃ eius et ea incorrupta et ĩcreata ac ſine initio eſſe aſſeuerarent deum q̃ non tanq̃ artificem ad exemplar hoc ẽ ideam intendentem feciſſe mundũ de materia quam vocant ẏlen que gignendi cauſas rebus omĩbus dediſſe aſſeratur ipſum quoq̃ mundum incorruptum nec creatum á factum eſtimarent. Alij quoq̃ ut Ariſtotiles cum ſuis diſputandũ putauit duo principia poſuiſſe al's ponerent materiam et ſpeciem et tercium cum his q̃d operatorium dicitur cui ſuppeteret competenter efficere quod adoriundum putaſſet, Quid igitur tam inconueniens q̃ ut eternitatem operis cum dei omĩpotentis cõiungerent eternitate vel ipſum opus deũ eſſe dicerent ut celum et terram et mare diuinis proſequerentur honoribus. Ex quo factum ẽ ut partes mundi deos eſſe crederetur· q̃uis de ipſo mundo non mediocris inter eos queſtio ſit. Nam pẏtagoras vnum mundum aſſeruit. Alij innumerabiles dicunt eẽ mundos ut ſcribit Democritus cui plurimum de phiſicis auctoritatis vetuſtas detulit ipſumq̃ mundum ſemper fuiſſe· et fore Ariſtotiles vſurpat dicere Plato autem contra non ſemper fuiſſe et ſemp̱ fore preſummit aſtruere, Plurimi vero nec fuiſſe ſemper nec ſemp̱ fore ſcriptis ſuis teſtificantur. Inter has diſſenſiones eoꝝ que poteſt eſſe veri eſtimacio cum alij mundum ipſum deum eſſe dicant quod ei mens diuina ut putant ineẽ videat. Alij partes eius Alij vtrũq̃ in q̃ nec q̃ figura ſit deoꝝ nec qui numerus· nec qui locus aut vita poſſit aut cura cõprehendi. Siquidem mũdi eſtimacionem volubilẽ rotundam ardentem quibuſdam incitatam motibus· ſine ſenſu deũ cõueniat intelligi qui alieno non ſuo motu feratur, Vnde diuino ſpiritu p̃uidens ſcĩ Moẏſes hominũ errores fore etiam cepiſſe in exordio ſermonis ſui ait.

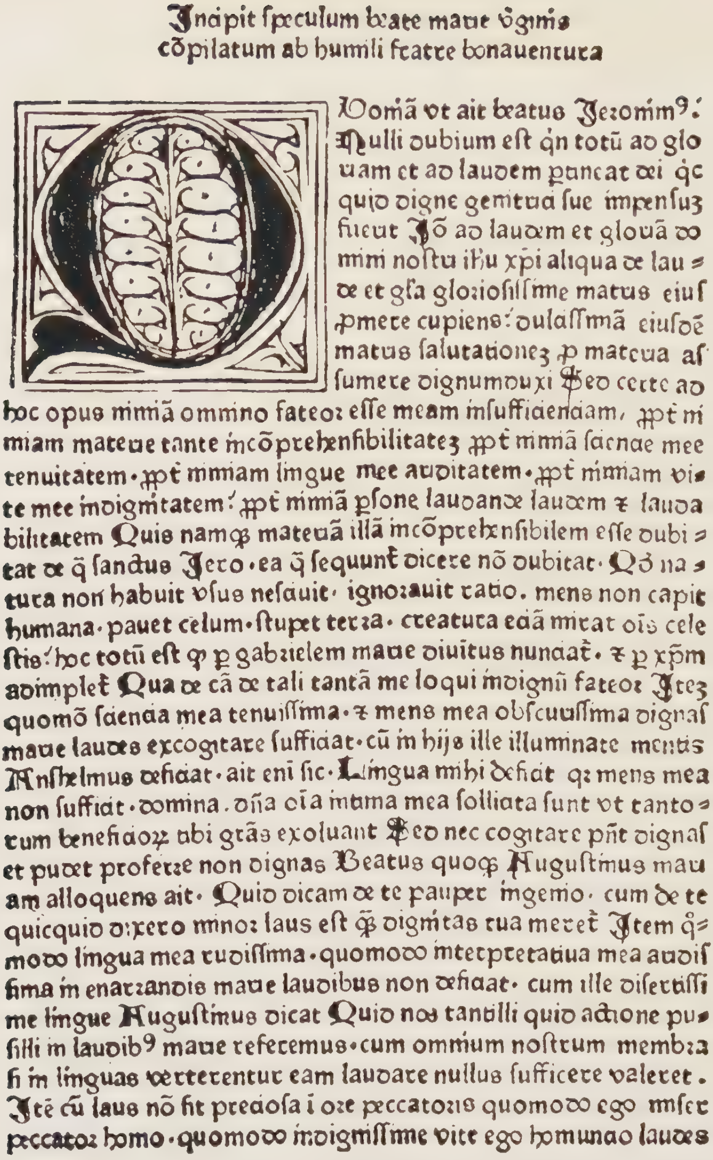
First page of *Hexameron*. Printed by John Schüssler, Augsburg, 1472. This book was studied by Christopher Columbus, mention of it being made in his writings.

from Zainer. Only ten books are credited to him, but all are of high quality.

John Bämler began to print in Augsburg in 1472 and continued until 1495. He was originally a scribe (*calligraphus*) or ornamental writer and probably a member of the wood-engravers' guild, as he was not included by that organization in the boycott declared against Zainer and Schüssler to which reference has been made above. Bämler, although a competitor of Zainer, was evidently on cordial terms with him, as is evidenced by the fact that many identical engravings appear in the works issued by the two establishments.

The Abbot Melchior of Stamham, who had befriended Zainer and Schüssler in their troubles with the engravers, set up a printing plant in the monastery of SS. Ulrich and Afra in 1472. He borrowed or purchased type faces from both Zainer and Bämler and bought five presses from Schüssler. He had five other presses made by a joiner in Augsburg, the whole costing 702 florins, which at that time was a large sum. He died in 1474.

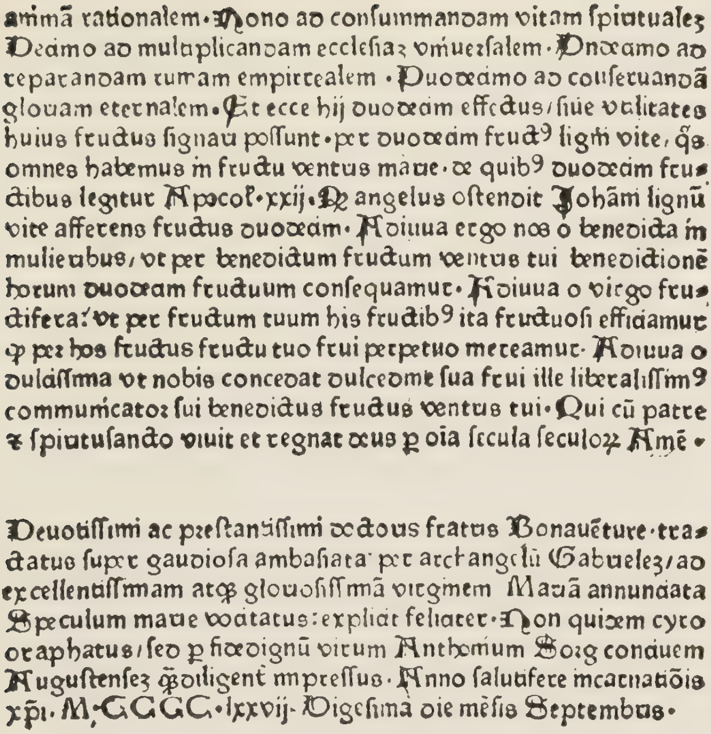
Anton Sorg, who was connected with the monastery printing shop, left it to set up in business for himself in 1475. He operated for eighteen years, becoming one of the most prolific of German printers and publishers. Sorg produced the first series of illustrations of the Ten Commandments. His most famous work was Reichenthal's account of the Council of Constance, which was illustrated with more than eleven hundred cuts. He issued a German Bible in 1477, in which a



Incipit ſpeculum beate marie v̓ginis
cōpilatum ab humili fratre bonauentura

Uoniã vt ait beatus Jeronim⁹:
Nulli dubium eſt q̇n totū ad glo
riam et ad laudem ꝑtineat dei q̇c
quid digne genitrici ſue impenſuȝ
fuerit Jdō ad laudem et gloriã do
mini noſtri ihū xp̄i aliqua de lau=
de et gl̄a glorioſiſſime matris eiuſ
ꝯmere cupiens: dulciſſimã eiuſdē
matris ſalutationeȝ ꝓ materia aſ
ſumere dignum duxi Sed certe ad
hoc opus nimiã omnino fateor eſſe meam inſufficienciam, ꝓpt̄ ni
miam materie tante incōprehenſibilitateȝ ꝓpt̄ nimiã ſciencie mee
tenuitatem. ꝓpt̄ nimiam lingue mee ariditatem. ꝓpt̄ nimiam vi
te mee indignitatem: ꝓpt̄ nimiã ꝑſone laudande laudem ⁊ lauda
bilitatem Quis namq̧ materiã illã incōprehenſibilem eſſe dubi=
tat de q̃ ſanctus Jero. ea q̃ ſequunt̄ dicere nō dubitat. Qđ na=
tura non habuit vſus neſciuit. ignorauit ratio. mens non capit
humana. pauet celum. ſtupet terra. creatura etiã miratur oīs cele
ſtis: hoc totū eſt qđ ꝑ gabrielem marie diuitus nunciat̄. ⁊ ꝑ xp̄m
adimplet̄ Qua de cã de tali tantã me loqui indignū fateor Jteȝ
quomō ſciencia mea tenuiſſima. ⁊ mens mea obſcuriſſima dignaſ
marie laudes excogitare ſufficiat. cū in hijs ille illuminate mentis
Anſhelmus deficiat. ait enī ſic. Lingua mihi deficit q꞉ mens mea
non ſufficit. domina. dn̄a oīa interna mea ſollicita ſunt vt tanto=
rum beneficioꝝ tibi grãs exoluant Sed nec cogitare pn̄t dignaſ
et pudet proferre non dignas Beatus quoq̧ Auguſtinus mari
am alloquens ait. Quid dicam de te pauper ingenio. cum de te
quicquid dixero minor laus eſt q̄ȝ dignitas tua meret̄ Jtem q̊=
modo lingua mea rudiſſima. quomodo interpretatiua mea aridiſ
ſima in enarrandis marie laudibus non deficiat. cum ille diſertiſſi
me lingue Auguſtinus dicat Quid nos tantilli quid actione pu=
ſilli in laudib⁹ marie referemus. cum omnium noſtrum membra
ſi in linguas verterentur eam laudare nullus ſufficere valeret.
Jtē cū laus nō ſit precioſa i ore peccatoris quomodo ego miſer
peccator homo. quomodo indigniſſime vite ego homuncio laudes

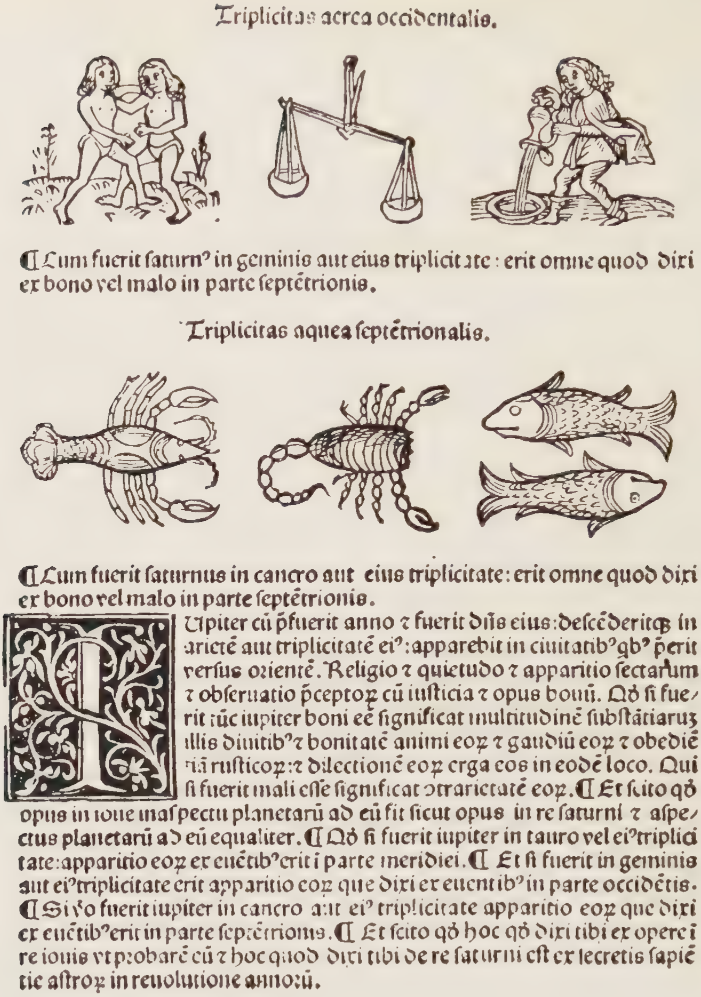
First page of Bonaventura's *Speculum Beatae Mariae Virginis.* Printed by Anton Sorg, Augsburg, 1476. Woodcut outline initial filled in by hand.



animā rationalem· Nono ad conſummandam vitam ſpiritualeꝫ Decimo ad multiplicandam eccleſiaꝫ vniuerſalem· Vndecimo ad reparandam ruinam empirrealem · Duodecimo ad conſeruandā gloriam eternalem· Et ecce hij duodecim effectus/ ſiue vtilitates huius fructus ſignari poſſunt· per duodecim fruct⁹ ligni vite, q̄s omnes habemus in fructu ventris marie· de quib⁹ duodecim fructibus legitur Apocol· xxij· Et angelus oſtendit Johāni lignū vite afferens fructus duodecim· Adiuua ergo nos o benedicta in mulieribus/ vt per benedictum fructum ventris tui benedictionē horum duodecim fructuum conſequamur· Adiuua o virgo fructifera: vt per fructum tuum his fructib⁹ ita fructuoſi efficiamur ꝙ per hos fructus fructu tuo frui perpetuo mereamur· Adiuua o dulciſſima vt nobis concedat dulcedine ſua frui ille liberaliſſim⁹ communicator ſui benedictus fructus ventris tui· Qui cū patre ⁊ ſpiritu ſancto viuit et regnat deus ꝑ oīa ſecula ſeculoꝝ Amē·

Deuotiſſimi ac preſtantiſſimi doctoris fratris Bonauēture· tractatus ſuper gaudioſa ambaſiata per archangelū Gabrieleꝫ/ ad excellentiſſimam atq̄ glorioſiſſimā virginem Mariā annunciata Speculum marie vocitatus: explicit feliciter· Non quidem cyrographatus/ ſed ꝑ fidedignū virum Anthonium Sorg ciuem Auguſtenſeꝫ ꝙdiligent̄ impreſſus· Anno ſalutifere incarnatiōis xp̄i· M·CCCC·lxxvij· Uigeſima die mēſis Septembris·

Last page, containing colophon, of Sorg's edition of Bonaventura's *Speculum Beatae Mariae Virginis.*



Triplicitas aerea occidentalis.

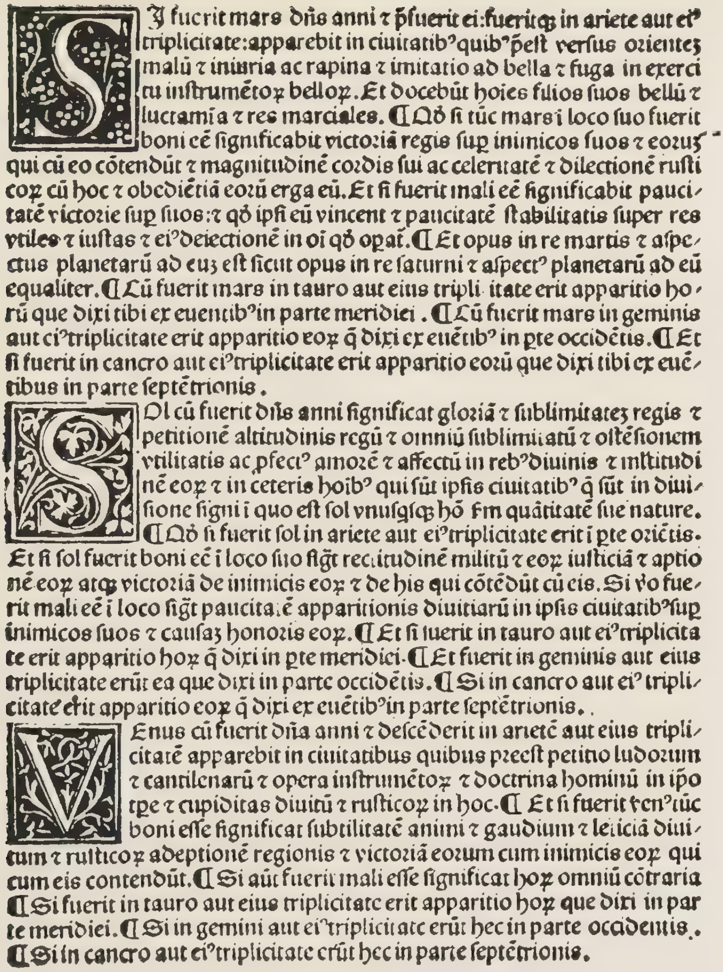
¶ Cum fuerit ſaturnꝰ in geminis aut eius triplicitate: erit omne quod dixi ex bono vel malo in parte ſeptētrionis.

Triplicitas aquea ſeptētrionalis.

¶ Cum fuerit ſaturnus in cancro aut eius triplicitate: erit omne quod dixi ex bono vel malo in parte ſeptētrionis.

IUpiter cū p̄fuerit anno ꝛ fuerit dñs eius: deſcēderitqꝫ in arietē aut triplicitatē eiꝰ: apparebit in ciuitatibꝰ qbꝰ p̄erit verſus orientē. Religio ꝛ quietudo ꝛ apparitio ſectarum ꝛ obſeruatio p̄ceptoꝝ cū iuſticia ꝛ opus boni. Qđ ſi fuerit tūc iupiter boni eē ſignificat multitudinē ſubſtātiaruꝫ illis diuitibꝰ ꝛ bonitatē animi eoꝝ ꝛ gaudiū eoꝝ ꝛ obediētiā ruſticoꝝ: ꝛ dilectionē eoꝝ erga eos in eodē loco. Qui ſi fuerit mali eſſe ſignificat ꝯtrarietatē eoꝝ. ¶ Et ſcito qđ opus in ioue in aſpectu planetarū ad eū fit ſicut opus in re ſaturni ꝛ aſpectus planetarū ad eū equaliter. ¶ Qđ ſi fuerit iupiter in tauro vel eiꝰ triplicitate: apparitio eoꝝ ex euētibꝰ erit i parte meridiei. ¶ Et ſi fuerit in geminis aut eiꝰ triplicitate erit apparitio eoꝝ que dixi ex euentibꝰ in parte occidētis. ¶ Si v͛o fuerit iupiter in cancro aut eiꝰ triplicitate apparitio eoꝝ que dixi ex euētibꝰ erit in parte ſeptētrionis. ¶ Et ſcito qđ hoc qđ dixi tibi ex opere i re iouis vt probarē cū ꝛ hoc quod dixi tibi de re ſaturni eſt ex ſecretis ſapiētie aſtroꝝ in reuolutione annorū.

This and the illustration opposite are facing pages from *Flores Astrologiae*. Printed by Erhard Ratdolt, Augsburg, 1488.



SI fuerit mars dñs anni ⁊ p̄fuerit ei: fueritqꝫ in ariete aut eiꝰ triplicitate: apparebit in ciuitatibꝰ quibꝰ p̄eſt verſus orienteꝫ malū ⁊ iniuria ac rapina ⁊ imitatio ad bella ⁊ fuga in exercitu inſtrumētoꝝ belloꝝ. Et docebūt hoïes filios ſuos bellū ⁊ luctamīa ⁊ res marciales. ¶ Qḋ ſi tūc mars ī loco ſuo fuerit boni eē ſignificabit victoriā regis ſuꝑ inimicos ſuos ⁊ eoruꝫ qui cū eo cōtendūt ⁊ magnitudinē cordis ſui ac celeritatē ⁊ dilectionē ruſticoꝝ cū hoc ⁊ obediētiā eorū erga eū. Et ſi fuerit mali eē ſignificabit paucitatē victorie ſuꝑ ſuos: ⁊ qḋ ipſi eū vincent ⁊ paucitatē ſtabilitatis ſuper res vtiles ⁊ iuſtas ⁊ eiꝰ deiectionē in oï qḋ opa͠t. ¶ Et opus in re martis ⁊ aſpectus planetarū ad euꝫ eſt ſicut opus in re ſaturni ⁊ aſpectꝰ planetarū ad eū equaliter. ¶ Cū fuerit mars in tauro aut eius triplicitate erit apparitio horū que dixi tibi ex euentibꝰ in parte meridiei. ¶ Cū fuerit mars in geminis aut eiꝰ triplicitate erit apparitio eoꝝ q̄ dixi ex euētibꝰ in ꝑte occidētis. ¶ Et ſi fuerit in cancro aut eiꝰ triplicitate erit apparitio eorū que dixi tibi ex euētibus in parte ſeptētrionis.

SOl cū fuerit dñs anni ſignificat gloriā ⁊ ſublimitateꝫ regis ⁊ petitionē altitudinis regū ⁊ omniū ſublimitatū ⁊ oſtēſionem vtilitatis ac ꝑfectꝰ amorē ⁊ affectū in rebꝰ diuinis ⁊ inſtitudinē eoꝝ ⁊ in ceteris hoïbꝰ qui ſūt ipſis ciuitatibꝰ q̄ ſūt in diuiſione ſigni ī quo eſt ſol vnuſquiſqꝫ hō̄ ſm quātitatē ſue nature. ¶ Qḋ ſi fuerit ſol in ariete aut eiꝰ triplicitate erit ī ꝑte oriētis. Et ſi ſol fuerit boni eē ī loco ſuo ſigt̄ rectitudinē militū ⁊ eoꝝ iuſticiā ⁊ aptionē eoꝝ atqꝫ victoriā de inimicis eoꝝ ⁊ de his qui cōtēdūt cū eis. Si v̓o fuerit mali eē ī loco ſigt̄ paucitatē apparitionis diuitiarū in ipſis ciuitatibꝰ ſuꝑ inimicos ſuos ⁊ cauſaꝫ honoris eoꝝ. ¶ Et ſi fuerit in tauro aut eiꝰ triplicitate erit apparitio hoꝝ q̄ dixi in ꝑte meridiei. ¶ Et fuerit in geminis aut eius triplicitate erūt ea que dixi in parte occidētis. ¶ Si in cancro aut eiꝰ triplicitate erit apparitio eoꝝ q̄ dixi ex euētibꝰ in parte ſeptētrionis.

VEnus cū fuerit dña anni ⁊ deſcēderit in arietē aut eius triplicitatē apparebit in ciuitatibus quibus preeſt petitio ludorum ⁊ cantilenarū ⁊ opera inſtrumētoꝝ ⁊ doctrina hominū in ip̄o tp̄e ⁊ cupiditas diuitū ⁊ ruſticoꝝ in hoc. ¶ Et ſi fuerit venꝰ tūc boni eſſe ſignificat ſubtilitatē animi ⁊ gaudium ⁊ leticiā diuitum ⁊ ruſticoꝝ adeptionē regionis ⁊ victoriā eorum cum inimicis eoꝝ qui cum eis contendūt. ¶ Si aūt fuerit mali eſſe ſignificat hoꝝ omniū cōtraria ¶ Si fuerit in tauro aut eius triplicitate erit apparitio hoꝝ que dixi in parte meridiei. ¶ Si in gemini aut eiꝰ triplicitate erūt hec in parte occidentis. ¶ Si in cancro aut eiꝰ triplicitate erūt hec in parte ſeptētrionis.

In the colophon of this book Ratdolt mentions the transfer of his business from Venice to Augsburg.

large number of the woodcuts were the same as those of the German Bible printed by Jodoc Pflanzmann, which, although undated, was probably issued about 1475. Carrying, as it does, a small cut at the head of each book, it is believed to be the first illustrated Bible to be printed in Germany. Some of Sorg's woodcuts were part of a set not originally designed for a Bible.

Erhard Ratdolt, Augsburg's most famous printer, was born in that city, but the date of his birth is not known. He is first heard of as a printer in Venice, to which city he went about 1476 and where he continued to reside for ten years. He returned to Augsburg in 1486, having been pressed to do so successively by two of the bishops of the city. He continued there as a printer for more than forty years, dying in 1527 or 1528. He attained a competence, as is proved by a tax record of the payment by his widow of the sum of 40 gulden.

Ratdolt made constant use of an extra color. It can be said of his work that it was nearly complete. Instead of leaving blank spaces for the decorator to fill in, he printed in engraved initials and border designs. He excelled as a type-founder, some writers even ranking him above Nicolaus Jenson and John of Speyer.

The invitation of the Bishop of Augsburg specifically suggested Ratdolt's return for the purpose of printing service books for the diocese, and his main business was the printing of missals and other service books, most of them embellished by tinting in colors.

In the colophon of *Obsequiale Augustense*, an illustrated volume printed at Augsburg in 1487, Ratdolt says:

> The laudable little work of the obsequialin of the saints in the diocese of Augsburg and of the very first morals, which are necessary for the service of the sacraments and what pertains to the sacraments, to be an image of the usage of the old time, has been amended in true study and watchful care and revised, explains felicitously Erhard Ratdolt, the skillful man of extraordinary intelligence and wonderful in his art of printing, in which he excels all others; formerly at Venice, now at Augsburg.

Other Augsburg printers were Peter Berger, John Blaubirer, John Froschauer, Christmann Heyny, Ludwig Hohenwang, Hermann Kästlin, Ambros Keller, John Keller, Anna Rügerin, John Schaur, Cristoph Schnaitter, John Schobsser, John Schönsperger, John Wiener, and Lucas Zeissenmair.

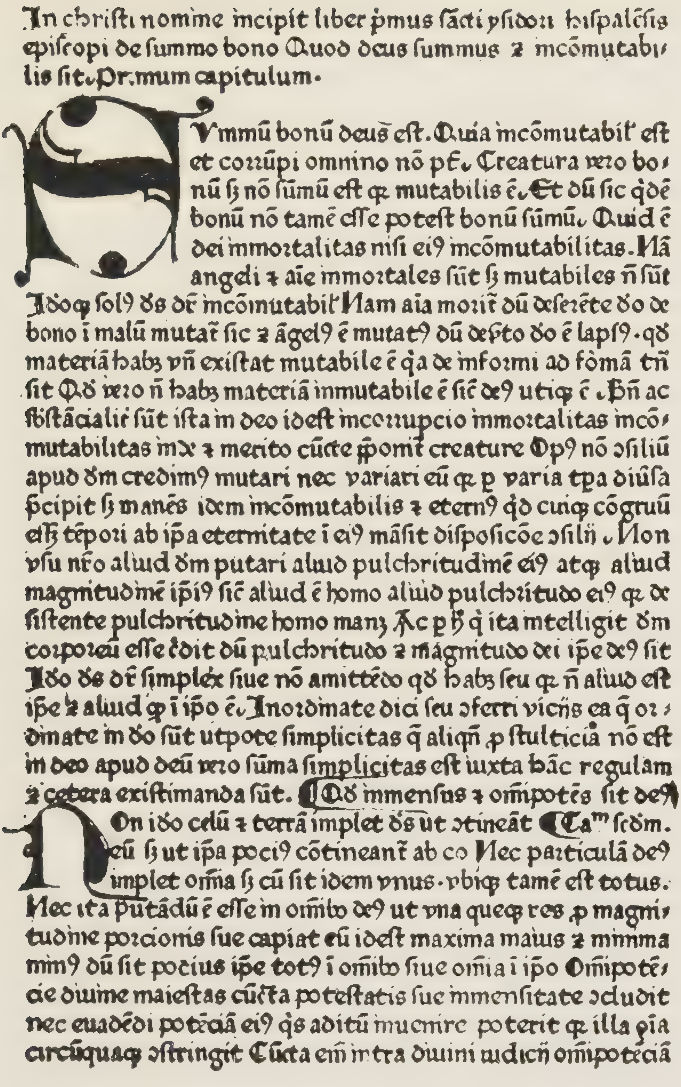
CHAPTER VI

ANTHONY KOBERGER, THE FIRST CAPTAIN OF THE PRINTING INDUSTRY

THE name of Koberger deserves a higher place in the history of printing than it is commonly allotted. Anthony Koberger the elder, the founder of the house, was great as a printer, though not the greatest of his period, great as a publisher, and great as a business man. As an organizer and captain of industry he seems to have been ahead of his time, and notwithstanding his energetic activity and aggressive competition with other publishers he held their steadfast regard and received their frequently expressed commendation.

With the advent of the House of Koberger the scene of our story of early printing shifts to the picturesque old city of Nuremberg. Anthony Koberger was probably not the first printer to establish himself there. John Sensenschmidt, who has previously been referred to as a later printer in Bamberg, produced a book in Nuremberg dated 1470, whereas Koberger cannot be identified with a year earlier than 1471, and his earliest dated production came in 1472. From that date until 1513, when he died, his Press was prolific, the total number of his known separate productions being 236.

To Anthony Koberger are usually ascribed thirteen

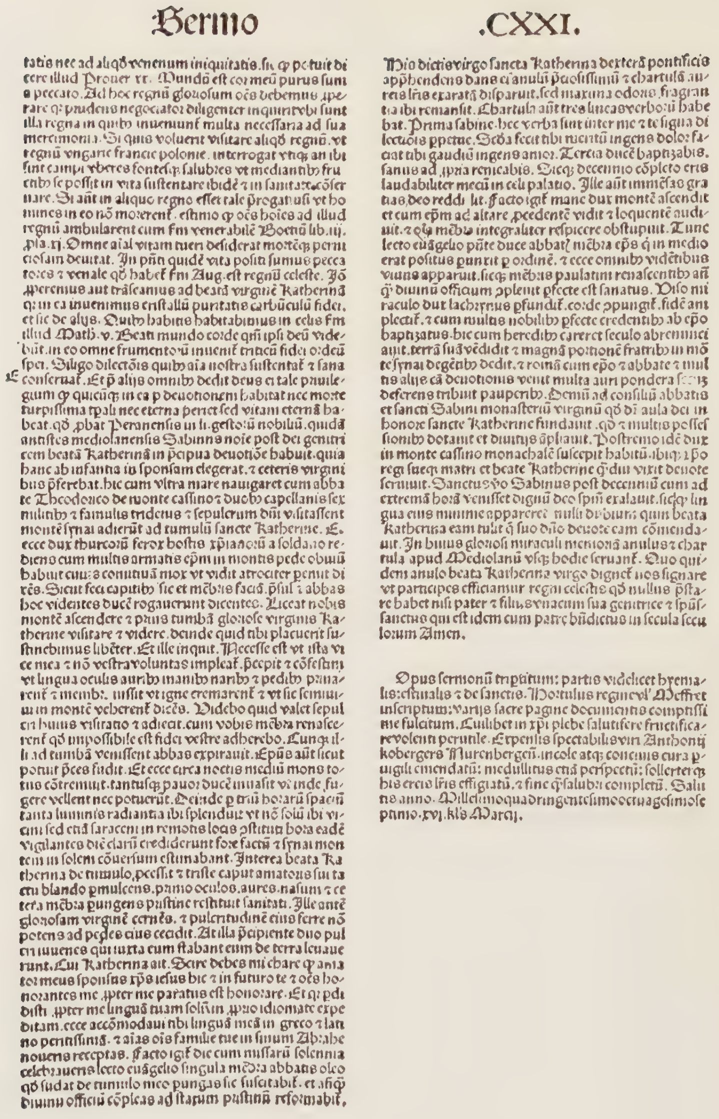


In chriſti nomine incipit liber pͥmus ſancti yſidori hiſpalēſis epiſcopi de ſummo bono Quod deus ſummus ⁊ incōmutabilis ſit. Primum capitulum.

Summū bonū deus eſt. Quia incōmutabil' eſt et corrūpi omnino nō pt. Creatura vero bonū ſꝫ nō ſūmū eſt ꝗ mutabilis ē. Et dū ſic q̇dē bonū nō tamē eſſe poteſt bonū ſūmū. Quid ē dei immortalitas niſi eiꝰ incōmutabilitas. Nā angeli ⁊ aīe immortales ſūt ſꝫ mutabiles n̄ ſūt. Ideoqꝫ ſolꝰ ds dr̄ incōmutabil'. Nam aīa morit̄ dū deſerēte do de bono ī malū mutat̄ ſic ⁊ āgelꝰ ē mutatꝰ dū deſerto do ē lapſꝰ. qd materiā habꝫ vn̄ exiſtat mutabile ē q̇a de informi ad fōmā tn̄ ſit. Qd vero n̄ habꝫ materiā inmutabile ē ſic deꝰ utiqꝫ ē. Bn̄ ac ſbſtācialit̄ ſūt iſta in deo ideſt incorrupcio immortalitas incōmutabilitas inde ⁊ merito cūcte ꝓponit̄ creature. Opꝰ nō ꝯſiliū apud dm credimꝰ mutari nec variari eū ꝗ ꝑ varia tpa diūſa ꝑcipit ſꝫ manēs idem incōmutabilis ⁊ eternꝰ q̇d cuiqꝫ cōgruū eēt tēpori ab ipā eternitate ī eiꝰ māſit diſpoſicōe ꝯſilij. Non vſu nr̄o aliud dm putari aliud pulchritudinē eiꝰ atqꝫ aliud magnitudinē ipiꝰ ſic aliud ē homo aliud pulchritudo eiꝰ ꝗ deſiſtente pulchritudine homo manꝫ. Ac ꝑ hꝯ q̇ ita intelligit dm corporeū eſſe ēdit dū pulchritudo ⁊ magnitudo dei ipē deꝰ ſit. Ideo ds dr̄ ſimplex ſiue nō amittēdo qd habꝫ ſeu ꝗ n̄ aliud eſt ipē ⁊ aliud qꝫ ī ipō ē. Inordinate dici ſeu ꝯferri vicijs ea q̄ ordinate in do ſūt utpote ſimplicitas q̄ aliqn̄ ꝓ ſtulticiā nō eſt in deo apud deū vero ſūma ſimplicitas eſt iuxta hāc regulam ⁊ cetera exiſtimanda ſūt. ¶ Qd immenſus ⁊ oīpotēs ſit deꝰ ¶ Caᵐ ſcdm.

Non ideo celū ⁊ terrā implet ds ut ꝯtineāt eū ſꝫ ut ipā pociꝰ cōtineant̄ ab eo Nec particulā deꝰ implet oīa ſꝫ cū ſit idem vnus. vbiqꝫ tamē eſt totus. Nec ita putādū ē eſſe in oībꝫ deꝰ ut vna queqꝫ res ꝓ magnitudine porcionis ſue capiat eū ideſt maxima maius ⁊ minima minꝰ dū ſit pocius ipē totꝰ ī oībꝫ ſiue oīa ī ipō. Oīpotēcie diuine maieſtas cūcta poteſtatis ſue immenſitate ꝯcludit nec euadēdi potēciā eiꝰ q̇s aditū inuenire poterit ꝗ illa ꝯīa circūquaqꝫ ꝯſtringit. Cūcta eīm intra diuini iudicij oīpotēciā

Page from *De Summo Bono*, one of the earliest, if not the earliest, of the books printed at Nuremberg, probably in 1470. Printer or printers unknown but probably John Sensenschmidt and Heinrich Kefer, the latter being one of Gutenberg's workmen at Mainz. It shows the capital "N" with crossbar reversed, which was characteristic of early Nuremberg printers.



Sermo .CXXI.

tatis nec ad aliqđ venenum iniquitatis. sic ꝙ potuit dicere illud Prouer. xx. Mundū est cor meū purus sum a peccato. Ad hoc regnū gloriosum oēs debemus ꝓperare q: prudens negociator diligenter inquirit vbi sunt illa regna in quibꝫ inueniunt multa necessaria ad sua mercimonia. Si quis voluerit visitare aliqđ regnū. vt regnū vngarie francie polonie. interrogat vtrū an ibi sint campi vberes fontesqꝫ salubres vt mediantibꝫ fructibꝫ se possit in vita sustentare ibidē ⁊ in sanitate cōseruare. Si aūt in aliquo regno esset tale ꝑrogatiuū vt homines in eo nō morerent. estimo ꝙ oēs hoīes ad illud regnū ambularent cum ꝟm venerabilē Boetiū lib. iij. ꝓsa. xj. Omne aīal vitam tueri desiderat mortēqꝫ perniciosam deuitat. In p̄nti quidē vita positi sumus peccatores ⁊ venale qđ habet ꝟm Aug. est regnū celeste. Jō ꝓperemus aut trāseamus ad beatā virginē Katherinā q: in ea inuenimus cristallū puritatis carbūculū fidei. et sic de alijs. Quibꝫ habitis habitabimus in celis ꝟm illud Math. v. Beati mundo corde qm̄ ipsi deū videbūt. in eo omne frumentorū inuenit triticū fidei ordeū spei. Siligo dilectōis quibꝫ aīa nostra sustentat ⁊ sana conseruat. Et p̄ alijs omnibꝫ dedit deus ei tale priuilegium ꝙ quicūqꝫ in ea p deuotionem habitat nec morte turpissima tꝑali nec eterna periet sed vitam eternā habeat. qđ ꝓbat Peranensis in li. gestorū nobiliū. quidā antistes mediolanensis Sabinus noīe post dei genitricem beatā Katherinā in p̄cipua deuotiōe habuit. quia hanc ab infantia in sponsam elegerat. ⁊ ceteris virginibus p̄ferebat. hic cum vltra mare nauigaret cum abbate Theoderico de monte cassino ⁊ duobꝫ capellanis sex militibꝫ ⁊ famulis tredecim ⁊ sepulcrum dn̄i visitassent montē synai adierūt ad tumulū sancte Katherine. E. ecce dux thurcorū ferox hostis xp̄ianorū a soldano rediens cum multis armatis ep̄m in montis pede obuiū habuit cuius conuiuiā mox vt vidit atrociter peniit dicēs. Sicut feci capitibꝫ sic et mēbris faciā. p̄sul ⁊ abbas hec videntes ducē rogauerunt dicentes. Liceat nobis montē ascendere ⁊ prius tumbā gloriose virginis Katherine visitare ⁊ videre. deinde quid tibi placuerit sustinebimus libēter. Et ille inquit. Necesse est vt ista vice mea ⁊ nō vestra voluntas impleat. p̄cepit ⁊ cōfestim vt lingua oculis auribꝫ manibꝫ naribꝫ ⁊ pedibꝫ priuarent ⁊ membris. iussit vt igne cremarent ⁊ vt sic semiuiui in montē veherent dicēs. Videbo quid valet sepulcri huius visitatio ⁊ adicit. cum vobis mēbra renascerent qđ impossibile est fidei vestre adherebo. Cumqꝫ illi ad tumbā venissent abbas expirauit. Ep̄us aūt sicut potuit p̄ces fudit. Et ecce circa noctis mediū mons totus cōtremuit. tantusqꝫ pauor ducē inuasit vt inde fugere vellent nec potuerūt. Deinde p triū horarū spaciū tanta luminis radiantia ibi splenduit vt nō solū ibi vicini sed etiā saraceni in remotis locis ꝯstituti hora eadē vigilantes diē clarū crediderunt fore factū ⁊ synai montem in solem cōuersum estimabant. Interea beata Katherina de tumulo ꝓcessit ⁊ triste caput amatoris sui tactu blando ꝑmulcens. primo oculos. aures. nasum ⁊ cetera mēbra pungens pristine restituit sanitati. Ille autē gloriosam virginē cernēs. ⁊ pulcritudinē eius ferre nō potens ad pedes eius cecidit. At illa p̄cipiente duo pulcri iuuenes qui iuxta eum stabant eum de terra leuauerunt. Cui Katherina ait. Scire debes mi chare ꝙ amator meus sponsus xp̄s iesus hic ⁊ in futuro te ⁊ oēs honorantes me ꝓpter me paratus est honorare. Et q: p̄didisti ꝓpter me linguā tuam soluam ꝓprio idiomate expeditam. ecce accōmodaui tibi linguā meā in greco ⁊ latino peritissimā. ⁊ aīas oīs familie tue in sinum Abrahe noueris receptas. Facto igit̃ die cum missarū solennia celebraueris lecto euāgelio singula mēbra abbatis oleo qđ sudat de tumulo meo pungas sic suscitabit. et antiq̄ diuinū officiū cōpleas ad statum pristinū reformabit. His dictis virgo sancta Katherina dexterā pontificis apprehendens dans ei anulū preciosissimū ⁊ chartulā aureis līris exaratā disparuit. sed maxima odoris fragrantia ibi remansit. Chartula aūt tres lineas verborū habebat. Prima sabine. hec verba sint inter me ⁊ te signa dilectiōis ꝑpetue. Scđa fecit tibi tuentū ingens dolor faciat tibi gaudiū ingens amor. Tercia ducē baptizabis. sanus ad ꝓpria remeabis. Sicqꝫ decennio cōpleto eris laudabiliter mecū in celi palatio. Ille aūt immēsas gratias deo reddidit. Facto igit̃ mane dux montē ascendit et cum ep̄m ad altare ꝓcedentē vidit ⁊ loquentē audiuit. ⁊ eius mēbra integraliter respicere obstupuit. Tunc lecto euāgelio p̄nte duce abbatis mēbra ep̄s q̄ in medio erat positus piunxit p ordinē. ⁊ ecce omnibꝫ vidētibus viuus apparuit. sicqꝫ mēbris paulatim renascentibꝫ an q̄ diuinū officium ꝯpleuit ꝑfecte est sanatus. Viso miraculo dux lachrymas ꝑfundit. corde ꝯpungit. fidē amplectit. ⁊ cum multis nobilibꝫ ꝑfecte credentibꝫ ab ep̄o baptizatus. hic cum heredibꝫ careret seculo abrenunciauit. terrā suā vēdidit ⁊ magnā portionē fratribꝫ in mōte synai degētibꝫ dedit. ⁊ romā cum ep̄o ⁊ abbate ⁊ multis alijs cā deuotionis venit multa auri pondera secum deferens tribuit pauperibꝫ. Demū ad consiliū abbatis et sancti Sabini monasteriū virginū qđ dr̄ aula dei in honore sancte Katherine fundauit. qđ ⁊ multis possessionibꝫ dotauit et diuitijs āpliauit. Postremo idē dux in monte cassino monachalē suscepit habitū. ibiqꝫ ꝑpo regi sueqꝫ matri et beate Katherine q̄diu vixit deuote seruiuit. Sanctus v̄o Sabinus post decenniū cum ad extremā horā venisset dignū deo spūm exalauit. sicqꝫ lingua eius minime appareret nulli dubium quin beata Katherina eam tulit q̄ suo dn̄o deuote eam cōmendauit. In huius gloriosi miraculi memoriā anulus ⁊ chartula apud Mediolanū vsqꝫ hodie seruant. Quo quidem anulo beata Katherina virgo dignet nos signare vt participes efficiamur regni celestis qđ nullus p̄stare habet nisi pater ⁊ filius vnacum sua genitrice ⁊ spūs sanctus qui est idem cum patre bn̄dictus in secula seculorum Amen.

Opus sermonū tripartitum: partis videlicet hyemalis: estiualis ⁊ de sanctis. Hortulus regine vel' Meffret inscriptum: varijs sacre pagine documentis comptissime fulcitum. Cuilibet in xp̄i plebe salutifere fructificare volenti perutile. Expensis spectabilis viri Anthonij kobergers Nurenbergeñ. incole atqꝫ conciuis cura ꝑuigili emendatū: medullitus etiā perspectū: sollerterqꝫ his ereis līris effigiatū. ⁊ fine q̄salubri completū. Salutis anno. Millesimoquadringentesimooctuagesimoseptimo. xvj. kl'is Marcij.

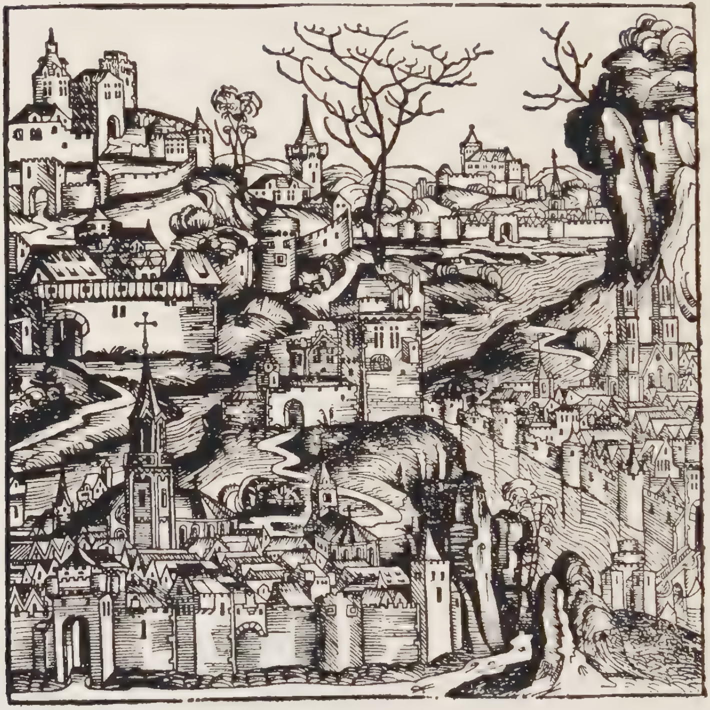
Page from Meffreth's *Sermones*. Printed by Anthony Koberger, Nuremberg, 1487.

(Copinger says fifteen) editions of the Bible, twelve in Latin and one in the vernacular. The latter, printed in 1483, is believed to be the first German Bible printed in Nuremberg, and it is the most splendid of early German Bibles. It was embellished with curious woodcuts previously used for the Cologne edition of the Bible printed by Quentell in 1480. What is said to have been intended as a portrait of the Pope is introduced as the principal figure among the fallen angels. The particular German idiom used by Koberger was not then in common use. Luther is reported to have said of it, "No one could speak German of this outlandish kind."

Koberger used for his most pretentious edition of the Bible the version prepared by Cardinal Hugo, an ecclesiastical authority of the thirteenth century, which had been circulated in manuscript form for more than two hundred years. It was issued in seven volumes folio, the printing being done, not by Koberger, but by his friend and associate, John Amerbach of Basel. It was begun in 1497 and completed seven years later. Commercially the venture was a failure.

Most of Koberger's publications were theological in character. At a time when Protestantism was fast coming into vogue, he held to the established Church of Rome, somewhat to the disadvantage of the financial aspect of his business, for the literary taste of the time concerned itself principally with controversial pamphlets and books, and the demand of the book-buying public was for them. Only three publications defuncta) nubere vlterius nollet. tamēq̃ qnq̃ ꝛ qnquagīta regnasset annos. ad extremū sub impio friderici ꝓplãri tumultu ex regio solo deturbat⁹ est. Et xp̄ofer⁹ bauarie dux sibi ex sorore nepos in ei⁹ locus suffectus q̄ auūculū sinus. x. annis q̄bus ipe regnauit in insula gothica regnare pmisit. Xp̄ofero aūt ex hūanis abeunte. dacie ac norwegie coronā cristigerus accepit. Sueci vo in electione regis discordantes alij carolum equestri dignitate insignē. alij canutū ei⁹ fratrē natu minorē regno pficiunt. Pendente adhuc electionis negotio carolus immissis militibus scoltonie qd̄ hodie stockhalm oppidū clam occupat. in q̄ regia sedes habet. Canutus p amicos arcē inuadit. hinc bellū inter fratres ortū ꝛ pugna diu anceps. occisis vtrumqꝫ plurib⁹ ea demū lege inducie pacte vt potestas eligendi regē exclusa nobilitate plebi fieret. in quā cū carolus gratiosior esset maiestas regni ad eum defert. Canut⁹ priuatā vitā degit. Carolus vo nouo regno tumidus atqꝫ insolens armatis nauibus heinricū etatē confectū. nulli noxiū sibi ipi viuentē e gothia ꝓpulsauit. qui etiam hodie in hūanis agens apud pomeranos (vnde illi origo fuit) pvo contentus vitā agere fert. q̃ sint incerta mortalia ꝛ q̄muida suo exemplo docent. qui tribus potentissimis regnis exutus nec paruam insulam in q̄ decem annis delituerat vsqꝫ ad mortem retinere potuit. etate plenissimus. Sed neqꝫ carolo scelera sua impunita fuere. qui dum xp̄i ecclas psequit. religionem comtemnit. sacerdotes dispoliat. festos dies obseruare prohibet. iura diuina ꝛ humana a Johanne benedicti filio vpsalensium p̄sulem viro cordato ꝛ impigro. a quo nobilitas regni excitata est magno p̄lio supatus ac regno ꝓpulsus in parua insula nonlonge ab ostio vistele ꝓpe prussiam exilium agit. Cristigerus in locum eius assumptus pietate ac iusticia melior. Iterum tria regna nostro tpe in vnum redegit. cui ꝛ gothia paret. gothoꝝ quondā sedes ꝛ patria.

Bohemia



Two pages from the "Nuremberg Chronicle," carrying the same map under different names.

Weſtualia germanie prouincia

Weſtualia rheno fluuio ab occidēti claudit̃. viſurgo ab oriēte quā veſerā hodie vocant. a ſeptentrione ꝑ phriſiā hꝫ ⁊ traiectēſiū terrā. meridiē haſſie mōtes excipiūt ꝗs anobos pholomeꝰ appellare videt̃. ex quibꝰ amaſis fluuiꝰ orit̃ q̄ Padeburnā ⁊ monaſteriū nō ignobiles ciuitates alluēs. mediā ferme ꝓuinciā interſecat ⁊ ꝑ phriſiā defluēs fert̃ in mare. Salas ꝗꝫ fluuiꝰ weſtualiā irrigat. inter quē ⁊ rhenū cū druſus germānicꝰ belligeraret domitiſ hoſtibꝰ victor appetijt. Quo aūt cultores huiꝰ terre vocauit antiq̄tas difficile dictu ē diſcordantibꝰ auctoribꝰ. Strabo vicinos rheni accolas hoc loco ſugambros appellare videt̃. q̄ duce melone cū romanis bella geſſere. victiqꝫ datis obſidibꝰ pacē obtinuere. quis calcata fide ⁊ ꝑditiſ obſidibꝰ rebellarūt. Pholomeꝰ ꝗꝫ a ꝑte ſeptētrionali germanie circa rhenū fluuiū Buſſatores habitare tradit ꝓuos appellatos ſiccābros. oquenos ⁊ lōgobardos inuenio apud Strabonē circa amaſim fluuiū bruteros habitaſſe ꝗs druſus nauali bello ſuꝑauit. Bruteros aūt bello victos ab auſtro in aquilonē ⁊ occeanū dilapſos. Ob quā rē cōiecturā cape poſſumꝰ hos eē q̄ hodie pruteni appellant̃ aquilonares ppl'i de qbꝰ ſupra diximꝰ. facile nāqꝫ bruteros in prutenos ſermo ꝯuertit. Carolꝰ magnus multa cū weſtualis geſſit ꝓlia eoſqꝫ magnis afflixit cladibꝰ coegitqꝫ xp̄i religionē amplecti relicto ydolorꝫ cultu. quā cū ſepiꝰ abnegaſſēt nec iuſiurādū aduerterēt vt metu pene rebelligionē cōpeſcerēt occultos ꝯſtituit iudices qbꝰ ꝑtātē dedit vt q̄s primū deieraſſe aliquē cōperiſſent aut fregiſſe fidē aut aliq̄d aliud flagiciū cōmiſiſſe mox illū ſupplicio afficerent vbi primū cōprehēdi poſſet nulla citatione ꝑuia aut defenſione ꝑmiſſa. elegit eīm viros graues ⁊ recti amantes quos plectere innocentes haud veriſimile ſint. Terruit ea res weſtualos ac deīnū in fide continuit. cum ſepe in nemoribus ⁊ proceres ⁊ mediocres viri laqueo ſuſpenſi inuenirent̃ nulla accuſationi prius audita. Querentibus tamen cauſam cōſtabat fregiſſe fidem. aut magnū aliquod ſcelus cōmiſiſſe qui necati reperiebantur. Id iudicium ad noſtram vſqꝫ durat etatem vocaturqꝫ vetitum. qui ei preſunt ſcabini appellantur. quorū ea preſumptio eſt vt per totam Germaniā iuriſditionē extendere velint. Secretos habent

Throughout the volume the leaves but not the pages are numbered.

bearing his name were in German, the remainder being in Latin. Editions of the classics occupied second place in his list.

Koberger maintained agencies in all the principal cities of Europe, not only for the sale of his books, but to secure desirable manuscripts for publication. The printing of books from manuscripts that were to be found only in public libraries was often attended with much difficulty, particularly when the loan of an original could not be obtained. Books were printed for him in other places, notably Basel and Lyons.

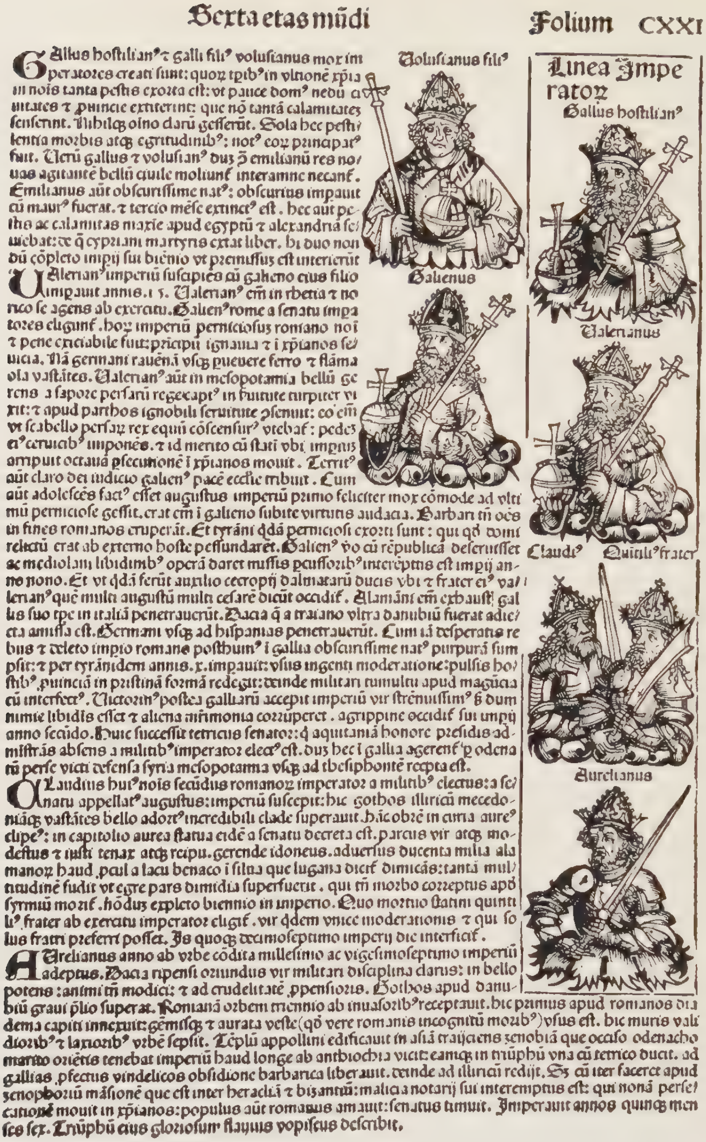
Koberger's printing establishment was of considerable size. John Andreas Endters is reported by Timperley as affirming that Koberger "kept daily twenty-four presses at work, and employed no less than an hundred journeymen, whom he maintained without doors. They had a set hour to come to work and to leave off; he admitted none individually into his house, but obliged them to wait at his door until they were all together, and they were admitted, and entered upon their respective employments."

Koberger used both Gothic and Roman type faces but had no Greek letters. Where Greek characters were demanded in a manuscript, spaces were left blank and later filled in by hand.

Anthony Koberger was the father of no less than twenty-five children. He was immediately succeeded in business, however, not by his sons, but by his nephew John. Later two sons, Anthony and Melchior, came into control. The great business structure which the founder of the house erected survived him only twenty-seven years, the end coming in 1540. During that period 53 works were added to the list of Koberger productions.

Hase quotes Jodocus Badius, a fellow publisher of Paris, as characterizing Koberger thus: "That glorious Nuremberger . . . esteemed by honorable men everywhere as the prince of booksellers . . . the man who conducted his business with the most exact integrity and with the highest ideals . . . with whom the production and distribution of good books was carried on as a sacred trust." The same author quotes another contemporary writer as speaking of Koberger's "enormous capacity for persistent work, the far-seeing and wide-reaching enterprise, the conscientious regard for the right of others, the large conceptions and the careful attention to details, the keen sense of humor and genial and cheerful manner." And Amerbach of Basel, himself a great printer, wrote to Koberger: "You have never printed anything that is worldly or frivolous; your books are all of righteous and godly literature. For the support of the true faith and for the development of godly scholarship you have brought before the world the books which are the most trustworthy and authoritative, the books which have stood the test of time."

The work of the early printers of Nuremberg, particularly with Roman type faces, is readily distinguished by the capital "N" in which the cross stroke slants the wrong way.



Sexta etas mūdi   Folium CXXI

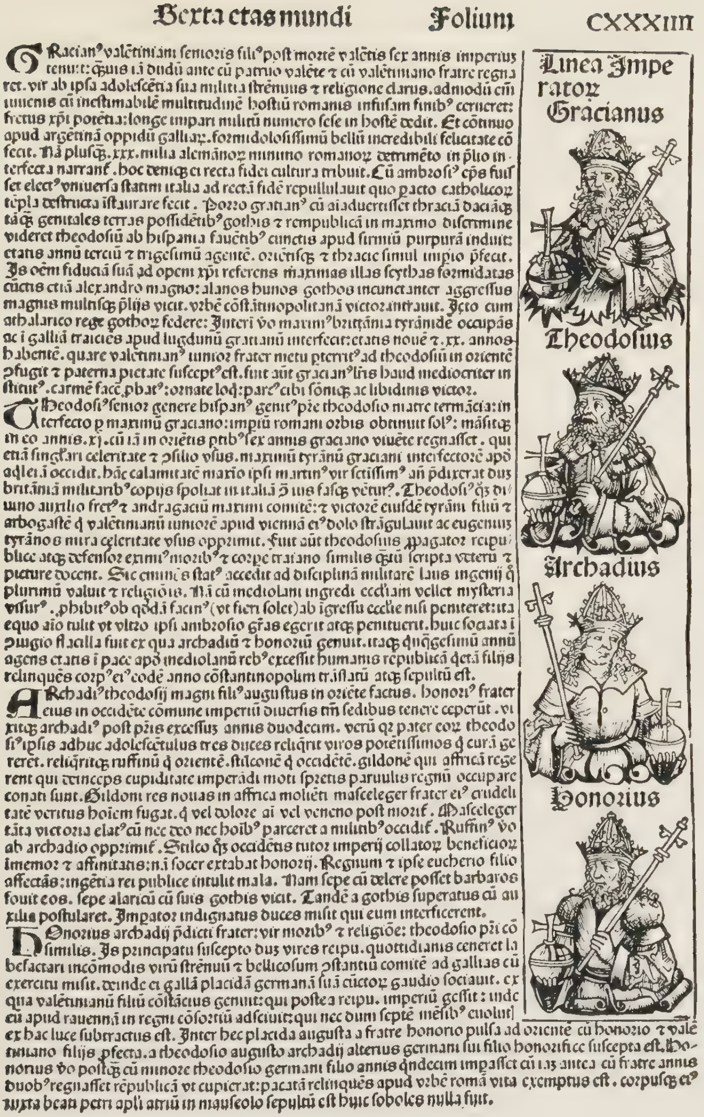
Gallus hoſtilianꝰ ⁊ galli filiꝰ voluſianus mox imperatores creati ſunt: quoꝝ tꝑibꝰ in vltionē xp̄iani noīs tanta peſtis exorta eſt: vt paucę domꝰ nedū ciuitates ⁊ ꝓuincie extiterint: que nō tantā calamitates ſenſerint. Nihilqꝫ oīno clarū geſſerūt. Sola hec peſtilentia morbis atqꝫ egritudinibꝰ: notꝰ eoꝝ principatꝰ fuit. Verū gallus ⁊ voluſianꝰ dux ꝯ emilianū res nouas agitantē bellū ciuile moliunt̄ interamne necant̄. Emilianus aūt obſcuriſſime natꝰ: obſcurius imperauit cū maurꝰ fuerat. ⁊ tercio mēſe extinctꝰ eſt. hec aūt peſtis ac calamitas maxie apud egyptū ⁊ alexandriā ſeuiebat: de q̄ cypriani martyris extat liber. hi duo nondū cōpleto imꝑij ſui biēnio vt premiſſus eſt interierūt.

Valerianꝰ imperiū ſuſcipiēs cū galieno eius filio imꝑauit annis .15. Valerianꝰ eñ in rhetia ⁊ norico ſe agens ab exercitu. Galienꝰ rome a ſenatu imꝑatores eligunt̄. hoꝝ imperiū pernicioſus romano noī ⁊ pene exiciabile fuit: pricipū ignauia ⁊ ī xp̄ianos ſeuicia. Nā germani rauēnā vſqꝫ ꝑuenere ferro ⁊ flāma oīa vaſtātes. Valerianꝰ aūt in meſopotamia bellū gerens a ſapore perſarū rege captꝰ in ſuitute turpiter vixit: ⁊ apud parthos ignobili ſeruitute ꝯſenuit: eo eñ vt ſcabello perſaꝝ rex equū cōſcenſurꝰ vtebat̄: pedes eiꝰ ceruicibꝰ imponēs. ⁊ id merito cū ſtatī vbi imꝑiū arripuit octauā ꝑſecutionē ī xp̄ianos mouit. Territꝰ aūt claro dei iudicio galienꝰ pacē ecclie tribuit. Cum aūt adoleſcēs factꝰ eſſet auguſtus imperiū primo feliciter mox cōmode ad vltimū pernicioſe geſſit. erat eñ ī galieno ſubite virtutis audacia. Barbari tñ oēs in fines romanos eruperāt. Et tyrāni qdā pernicioſi exorti ſunt: qui qḋ domi relictū erat ab externo hoſte peſſundaret. Galienꝰ vo cū rēpublicā deſeruiſſet ac mediolani libidinibꝰ operā daret miſſis ꝑcuſſoribꝰ interēptus eſt imꝑij anno nono. Et vt qdā ferūt auxilio cecropij dalmatarū ducis vbi ⁊ frater eiꝰ valerianꝰ quē multi auguſtū multi ceſarē dicūt occidit̄. Alamāni eñ exhauſtā gallus ſuo tꝑe in italiā penetrauerūt. Dacia q̄ a traiano vltra danubiū fuerat adiecta amiſſa eſt. Germani vſqꝫ ad hiſpanias penetrauerūt. Cum iā deſperatis rebus ⁊ deleto imꝑio romano poſthumꝰ ī gallia obſcuriſſime natꝰ purpurā ſumpſit: ⁊ per tyrānidem annis .x. imꝑauit: vſus ingenti moderatione: pulſis hoſtibꝰ ꝓuinciā in priſtinā formā redegit: deinde militari tumultu apud magūciā cū interfectꝰ. Victorinꝰ poſtea galliarū accepit imperiū vir ſtrēnuiſſimꝰ ſꝫ dum nimie libidīs eſſet ⁊ aliena mřimonia corrūperet. agrippine occidit̄ ſui imꝑij anno ſecūdo. Huic ſucceſſit tetricus ſenator: q aquitaniā honore preſidis adminiſtrās abſens a militibꝰ imperator electꝰ eſt. dū hec ī gallia agerent̄ ꝑ odenatū perſe victi defenſa ſyria meſopotamia vſqꝫ ad theſiphontē recepta eſt.

Claudius huiꝰ noīs ſecūdus romanoꝝ imperator a militibꝰ electus: a ſenatu appellatꝰ auguſtus: imperiū ſuſcepit: hic gothos illiricū macedoniāqꝫ vaſtātes bello adortꝰ incredibili clade ſuperauit. Hācobrē in curia aureꝰ clipeꝰ: in capitolio aurea ſtatua eidē a ſenatu decreta eſt. parcus vir atqꝫ modeſtus ⁊ iuſti tenax atqꝫ reipu. gerende idoneus. aduerſus ducenta milia alamanoꝝ haud ꝓcul a lacu benaco ī ſilua que lugana dicit̄ dimicās: tantā multitudinē fudit vt egre pars dimidia ſuperfuerit. qui tñ morbo correptus apḋ ſyrmiū morit̄. nōdū expleto biennio in imperio. Quo mortuo ſtatim quintilꝰ frater ab exercitu imperator eligit̄. vir qdem vnice moderationis ⁊ qui ſolus fratri preferri poſſet. Is quoqꝫ decimoſeptimo imperij die interficit̄.

Aurelianus anno ab vrbe cōdita milleſimo ac vigeſimoſeptimo imperiū adeptus. Dacia ripenſi oriundus vir militari diſciplina clarus: in bello potens: animi tñ modici: ⁊ ad crudelitatē ꝓpenſioris. Gothos apud danubiū graui ꝓlio ſuperat. Romanū orbem triennio ab inuaſoribꝰ receptauit. hic primus apud romanos diadema capiti innexuit: gēmiſqꝫ ⁊ aurata veſte (qḋ vere romanis incognitū moribꝰ) vſus eſt. hic muris validioribꝰ ⁊ laxioribꝰ vrbē ſepſit. Tēplū appollini edificauit in aſiā traijciens zenobiā que occiſo odenacho marito oriētis tenebat imperiū haud longe ab anthiochia vicit: eamqꝫ in triūphū vna cū tetrico ducit. ad gallias ꝓfectus vindelicos obſidione barbarica liberauit. deinde ad illiricū rediit. Sꝫ cū iter faceret apud zenophoriū māſionē que eſt inter heracliā ⁊ bizantiū: malicia notarij ſui interemptus eſt: qui nonā perſecutionē mouit in xp̄ianos: populus aūt romanus amauit: ſenatus timuit. Imperauit annos quinqꝫ menſes ſex. Triūphū eius glorioſum flauius vopiſcus deſcribit.

Two pages from the “Nuremberg Chronicle,” on which a picture



Sexta etas mundi Folium CXXXIII

Linea Imperatoꝛ
Gracianus
Theodoſius
Archadius
Honoꝛius

GRacianꝰ valētiniani ſenioꝛis filiꝰ poſt moꝛtē valētis ſex annis imperiū tenuit: quis iā dudū ante cū patruo valēte ⁊ cū valētiniano fratre regnaret. vir ab ipſa adoleſcētia ſua militia ſtrēnuus ⁊ religione clarus. admodū cū iuuenis cū ineſtimabilē multitudinē hoſtiū romanis infuſam finibꝰ cerneret: fretus xp̄i potētia: longe impari militū numero ſeſe in hoſtē dedit. Et cōtinuo apud argētinā oppidū galliaꝝ. formidoloſiſſimū bellū incredibili felicitate cōfecit. Nā pluſq̄ .xxx. milia alemānoꝝ minimo romanoꝝ detrimēto in p̄lio interfecta narrant̄. hoc deniq̄ ei recta fidei cultura tribuit. Cū ambroſiꝰ ep̄s fuiſſet electꝰ vniuerſa ſtatim italia ad rectā fidē repullulauit quo pacto catholicoꝝ tēpla deſtructa īſtaurare fecit. Porro gratianꝰ cū aiaduertiſſet thraciā daciāq̄ tāq̄ genitales terras poſſidētibꝰ gothis ⁊ rempublicā in maximo diſcrimine videret theodoſiū ab hiſpania fauētibꝰ cunctis apud ſirmiū purpurā induit: etatis annū terciū ⁊ trigeſimū agentē. oꝛiētiſq̄ ⁊ thracie ſimul imꝑio p̄fecit. Is oēm fiduciā ſuā ad opem xp̄i referens maximas illas ſcythas formidatas cūctis etiā alexandro magno: alanos hunos gothos incunctanter aggreſſus magnis multiſq̄ p̄lijs vicit. vrbē cōſtātinopolitanā victoꝛ intrauit. Icto cum athalarico rege gothoꝝ federe: Interī vō maximꝰ britānia tyrānide occupās ac ī galliā traiciēs apud lugdunū gratianū interfecit: etatis nouē ⁊ .xx. annos habentē. quare valētinianꝰ iunioꝛ frater metu pterritꝰ ad theodoſiū in oꝛientē ꝯfugit ⁊ paterna pietate ſuſceptꝰ eſt. fuit aūt gracianꝰ lr̄is haud mediocriter inſtitutꝰ. carmē facere p̄batꝰ: oꝛnate loq̄: parcꝰ cibi ſōniq̄ ac libidinis victoꝛ.

THeodoſiꝰ ſenioꝛ genere hiſpanꝰ genitꝰ p̄re theodoſio matre termācia: interfecto p̄ maximū graciano: imꝑiū romani oꝛbis obtinuit ſolꝰ: māſitq̄ in eo annis .xj. cū iā in oꝛiētis ptibꝰ ſex annis graciano viuēte regnaſſet. qui etiā ſinglari celeritate ⁊ ꝯſilio vſus. maximū tyrānū graciani interfectoꝛē apō aqleiā occidit. hāc calamitatē maximo ipſi martinꝰ vir ſctiſſimꝰ añ p̄dixerat dux britāniā militaribꝰ copijs ſpoliat in italiā ꝯ̄ ius faſq̄ vēturꝰ. Theodoſiꝰ q̄z diuino auxilio fretꝰ ⁊ andragaciū maximi comitē: ⁊ victoꝛē eiuſdē tyrāni filiū ⁊ arbogaſtē q̄ valētinianū iunioꝛē apud viennā eiꝰ dolo ſtrāgulauit ac eugenium tyrānos mira celeritate vſus opprimit. Fuit aūt theodoſius ꝓpagatoꝛ reipublice atq̄ defenſoꝛ eximiꝰ moꝛibꝰ ⁊ coꝛpe traiano ſimilis q̄ntū ſcripta veterū ⁊ picture docent. Sic enim in eo ſtatꝰ accedit ad diſciplinā militarē laus ingenij q̄ plurimū valuit ⁊ religiōis. Nā cū mediolani ingredi eccl'iam vellet myſteria viſurꝰ. p̄hibitꝰ ob q̄dd aī facinꝰ (vt fieri ſolet) ab īgreſſu eccl'ie niſi peniteret: ita equo aīo tulit vt vltro ipſi ambroſio grās egerit atq̄ penituerit. huic ſociata ī ꝯiugio flacilla fuit ex qua archadiū ⁊ honoꝛiū genuit. itaq̄ q̄nq̄geſimū annū agens etatis ī pace apō mediolanū rebꝰ exceſſit humanis rempublicā q̄etā filijs relinquēs coꝛpꝰ eiꝰ eodē anno cōſtantinopolim trāſlatū atq̄ ſepultū eſt.

ARchadiꝰ theodoſij magni filiꝰ auguſtus in oriēte factus. honoꝛiꝰ frater eius in occidēte cōmune imperiū diuerſis tñ ſedibus tenere ceperūt. vixitq̄ archadiꝰ poſt p̄ris exceſſuz annis duodecim. verū q2 pater coꝝ theodoſiꝰ ipſis adhuc adoleſcētulus tres duces reliq̄t viros potētiſſimos q̄ curā gereret. reliq̄ritq̄ ruffinū q̄ oꝛientē. ſtilconē q̄ occidētē. gildonē qui affricā regerent qui deinceps cupiditate imperādi moti ſpretis paruulis regnū occupare conati ſunt. Gildoni res nouas in affrica moliēti maſceleger frater eiꝰ crudelitatē veritus hoiem fugat. q̄ vel doloꝛe aī vel veneno poſt moꝛit̄. Maſceleger tāta victoꝛia elatꝰ cū nec deo nec hoibꝰ parceret a militibꝰ occidit̄. Ruffinꝰ vō ab archadio opprimit̄. Stilco q̄z occidētis tutoꝛ imperij collatoꝝ beneficioꝝ imemoꝛ ⁊ affinitatis: nā ſocer extabat honoꝛij. Regnum ⁊ ipſe euchenio filio affectās: ingētia rei publice intulit mala. Nam ſepe cū delere poſſet barbaros fouit eos. ſepe alaricū cū ſuis gothis vicit. Tandē a gothis ſuperatus cū auxilia poſtularet. Impatoꝛ indignatus duces miſit qui eum interficerent.

HOnoꝛius archadij p̄dicti frater: vir moꝛibꝰ ⁊ religiōe: theodoſio p̄ri cōſimilis. Is principatu ſuſcepto dux vires reipu. quottidianis ceneret labefactari incōmodis virū ſtrēnuū ⁊ bellicoſum ꝯſtantiū comitē ad gallias cū exercitu miſit. deinde ei gallā placidā germanā ſuā cūctoꝝ gaudio ſociauit. ex qua valētinianū filiū cōſtācius genuit: qui poſtea reipu. imperiū geſſit: inde eū apud rauennā in regni cōſoꝛtiū adſciuit: qui nec dum ſeptē mēſibꝰ euolutis ex hac luce ſubtractus eſt. Inter hec placida auguſta a fratre honoꝛio pulſa ad oꝛientē cū honoꝛio ⁊ valētiniano filijs ꝓfecta. a theodoſio auguſto archadij alterius germani ſui filio honoꝛifice ſuſcepta eſt. Honoꝛius vō poſtq̄ cū minoꝛe theodoſio germani filio annis q̄ndecim impaſſet cū iā antea cū fratre annis duobꝰ regnaſſet rēpublicā vt cupierat: pacatā relinquēs apud vrbē romā vita exemptus eſt. coꝛpuſq̄ eiꝰ iuxta beati petri ap̄li atriū in mauſeolo ſepultū eſt huic ſoboles nulla fuit.

of an Emperor is made to do double duty under different names.

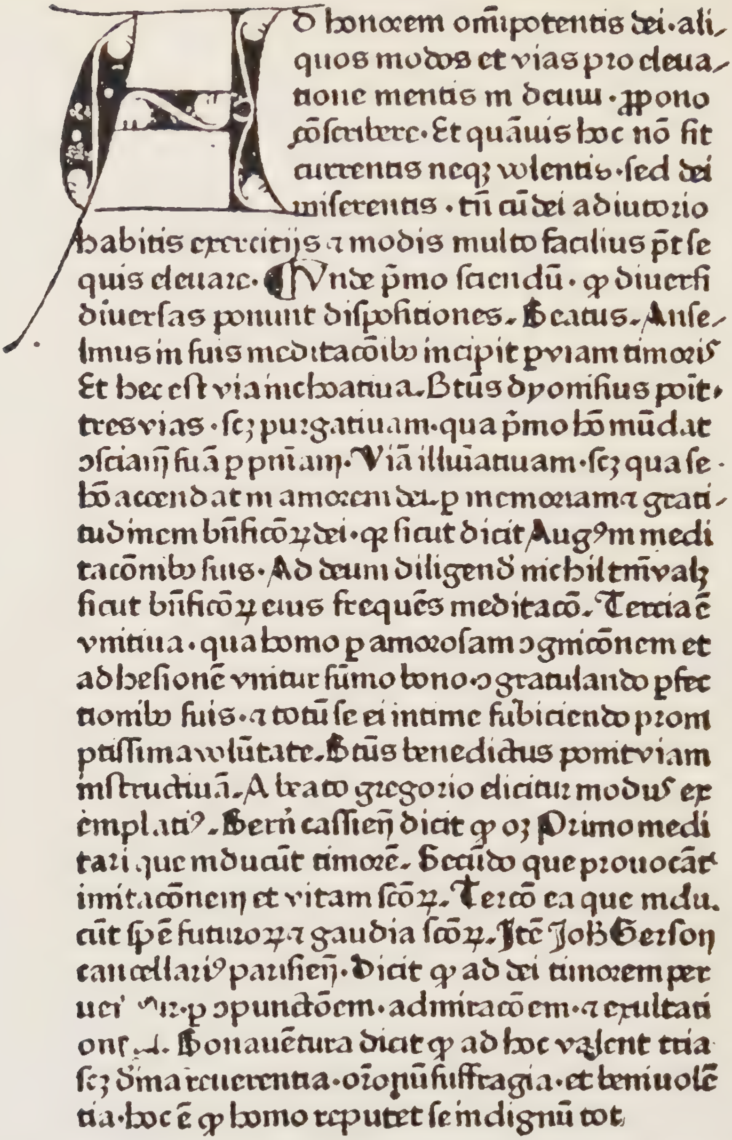
Anthony Koberger's most famous publication was the *Liber Chronicarum*, a summary of the history, geography, and wonders of the world, known usually as the "Nuremberg Chronicle." This well-known work, issued in 1493, was compiled by Hartmann Schedel in association with George Alt. It is a volume of 596 pages, characterized by a profusion of illustrations, there being 1,809 pictures, portraits, and maps. In providing his readers with this number of illustrations, however, the author used only 645 different blocks, some of them being made to do duty in illustrating different subjects as many as ten times each. For instance, 44 cuts depict 224 different kings and emperors, 28 cuts served for 198 popes, and 22 cuts for 69 cities. On leaf 252 appears a statement that printing was invented in Germany in 1440. The volume contains the first published map of Central Europe. The authors are believed to have received no pay for the preparation of the "Chronicle" other than, as was usually the case, an agreed upon number of copies of the work.

Aside from the Kobergers, Nuremberg produced no early printers of distinction. Heinrich Kefer, who was associated with John Sensenschmidt, is usually mentioned because he is thought to have been one of John Gutenberg's workmen in the first printing office at Mainz. Friedrich Creussner was one of the earliest (1472). He was producing important works until the last year of the century.

Nuremberg is credited by Timperley with being the scene of an innovation in the relations of printer, publisher, and author. The first printers were sometimes publishers, and these were booksellers as well. It will be recalled that John Fust of Mainz died while in Paris on a bookselling expedition, and reference has been made to Peter Schoeffer's book advertisements. To be a publisher, therefore, required the investment of considerable capital. Sometimes the production of a book stretched over several years, during which materials had to be bought, wages paid, and other expenses met. Unless a book sold readily, financial embarrassment was the sure result to the printer.

The first bookseller who purchased manuscripts from authors and employed printers to produce them because he had no press of his own is said by Timperley to have been John Otto of Nuremberg, who is supposed to have established himself in business on this basis in 1516.

It was in Nuremberg that one of the first attempts to interfere with the liberty of the press was made. The Edict of Nuremberg, issued by the Pope's legate at the diet in that city in 1524, decreed, among other things, that "printers should print no new things for the future, and that some holy and learned men, appointed for the purpose by the magistrates, within their several jurisdictions, should peruse and examine what came from the press, and that what they disapproved should not be sold." This edict was directed against the rising tide of Lutheranism, but it has curious echoes in the censorship agitations of to-day.



Ad honorem om̄ipotentis dei·ali-
quos modos et vias pro eleua-
tione mentis in deum·ꝓpono
cōſcribere·Et quāuis hoc nō ſit
currentis neq; volentis·ſed dei
miſerentis·tm̄ cū dei adiutorio
habitis exercitijs ⁊ modis multo facilius p̄t ſe
quis eleuare·¶Vnde p̄mo ſciendū·ꝙ diuerſi
diuerſas ponunt diſpoſitiones·Beatus·Anſe-
lmus in ſuis meditacōib; incipit ꝑ viam timoris
Et hec eſt via incheatiua·Btūs dyoniſius poīt·
tres vias·ſcꝫ purgatiuam·qua p̄mo hō mūdat
ↄſciam ſuā ꝑ pn̄iam·Viā illūiatiuam·ſcꝫ qua ſe·
hō accendat in amorem dei·ꝑ memoriam ⁊ grati-
tudinem bn̄ficiōꝝ dei·q2 ſicut dicit Aug9 in medi
tacōnib; ſuis·Ad deum diligend' nichil tm̄ valꝫ
ſicut bn̄ficiōꝝ eius frequēs meditacō·Tercia ē
vnitiua·qua homo ꝑ amoroſam ↄgnicōnem et
adheſionē vnitur ſūmo bono·ↄgratulando ꝑfec
tionib; ſuis·⁊ totū ſe ei intime ſubiciendo prom
ptiſſima volūtate·Btūs benedictus ponit viam
inſtructiuā·A beato gregorio elicitur modus ex
emplati9·Bern caſſieū dicit ꝙ oꝫ Primo medi
tari que inducūt timorē·Secūdo que prouocāt
imitacōnem et vitam ſcōꝝ·Tercō ea que indu-
cūt ſpē futuroꝝ ⁊ gaudia ſcōꝝ·Itē Joh Gerſon
cancellari9 pariſieū·Dicit ꝙ ad dei timorem per
uenitur·ꝑ ↄpunctōem·admiracōem·⁊ exultaci
onē·Bonauētura dicit ꝙ ad hoc valent tria
ſcꝫ d'ina reuerentia·orō ꝓ ſuffragia·et beniuolē
tia·hoc ē ꝙ homo reputet ſe indignū tot

First page of *The Alphabet of Love*. Printed by Ulrich Zell, Cologne, 1466. Zell's later books contained 27 lines to the page. Before deciding upon that number he made several experiments, starting with 34 lines. This page, it will be noted, contains 31 lines.

CHAPTER VII

THE EARLY PRINTERS OF COLOGNE

WHEN the dispersal of printers from Mainz occurred in 1462, it was but natural that at least one printer should go to Cologne, then as now one of the important cities of Europe. Trade routes from various directions found a common center in Cologne. It was the seat of an Archbishop and the location of one of Europe's great cathedrals. Its University was attended by no less than four thousand students, and its library, principally theological in character, contained more than four hundred works. And it was within easy sailing distance down the River Rhine.

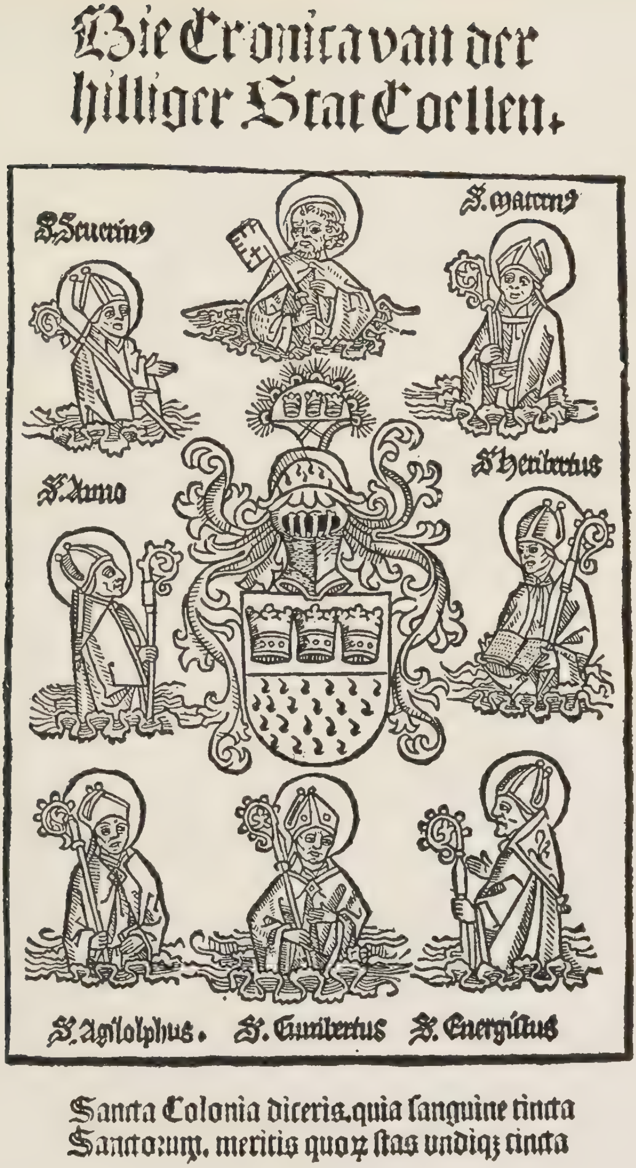
Ulrich Zell was the first printer to establish himself in Cologne. He was a native of Hanau, a town not far from Frankfort, and he signed himself "clerke of the Diocese of Mainz," although he was not an ecclesiastic. He is said to have been one of Gutenberg's apprentices.

Zell's first Cologne book to bear a date (1466) was *Super Psalmum Miserere*, but other books, notably Cicero's *De Officiis*, are thought by some bibliographers to have been issued earlier by him. The *De Officiis* contends with two others for the honor of being the first printed Latin classic, the other two being Sweynheym and Pannartz's *De Oratore*, printed in Subiaco in 1465, and Fust and Schoeffer's *De Officiis et Paradoxa*, printed the same year in Mainz.

One hundred and seventy-seven books with different titles are known to have been produced by Zell, many of them, however, being only pamphlets of moderate size. The total number of his productions is thought to be about two hundred. Zell's work was usually of an indifferent quality. He printed in Cologne for forty years, but never printed a book in the German language.

Zell's prominence in printing lore, in addition to his work as a producer of printing, is due to two circumstances. First, he was the instructor of England's most celebrated printer, William Caxton, who partly learned his art in Cologne; and second, there is a reference to Zell in a passage in the "Cologne Chronicle" of 1499 relating to the invention of printing upon which was based the account of Junius that, as we shall see later, started the controversy between the Germans and the Dutch.

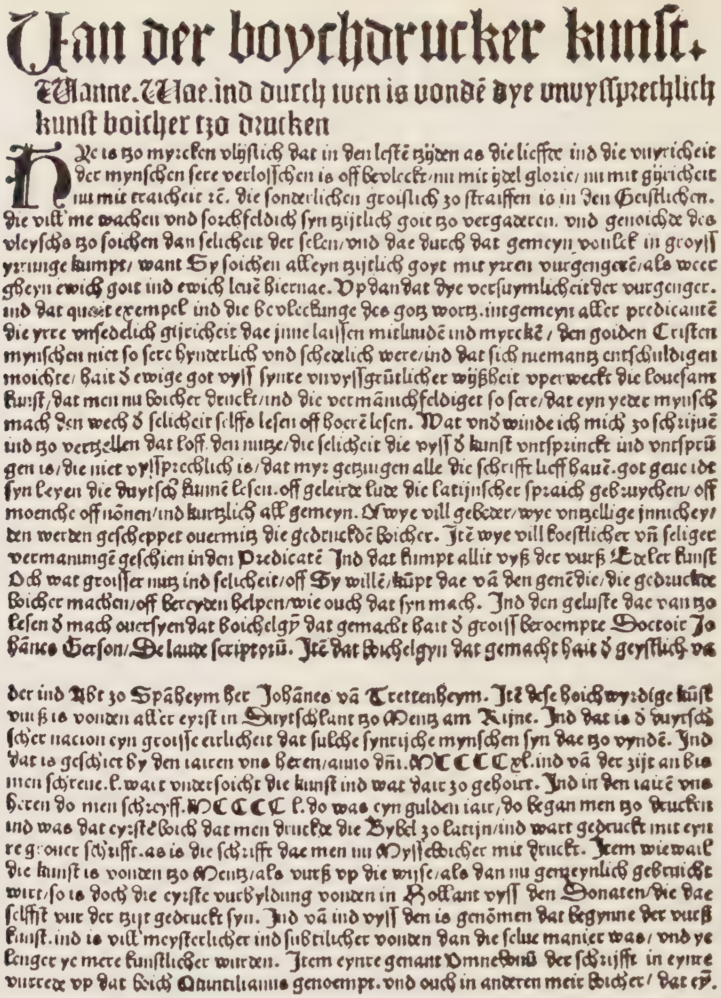
Arnold ther Hoernen was an early Cologne printer. His first dated book was Rolewinck's *Sermons*, issued in 1470, but he printed others in advance of it without date. It is sometimes contended for Ther Hoernen that he originated the title page. In his first book there appears on the first page a paragraph giving the title and date of issue, but not the name of the printer or the place of the printing. The remainder of the page is blank, as is also the other side of the leaf on which it was printed. Peter Schoeffer, however, had done the


Die Cronica van der hilliger Stat Coellen.

S. Seuerinꝰ
S. maternꝰ
S. Heribertus
S. Anno
S. Agilolphus.
S. Cunibertus
S. Euergiſlus

Sancta Colonia diceris.quia ſanguine tincta
Sanctorum. meritis quoꝝ ſtas undiqꝫ cincta

Title page of the "Cologne Chronicle." Printed by John Koelhoff, Cologne, 1499.

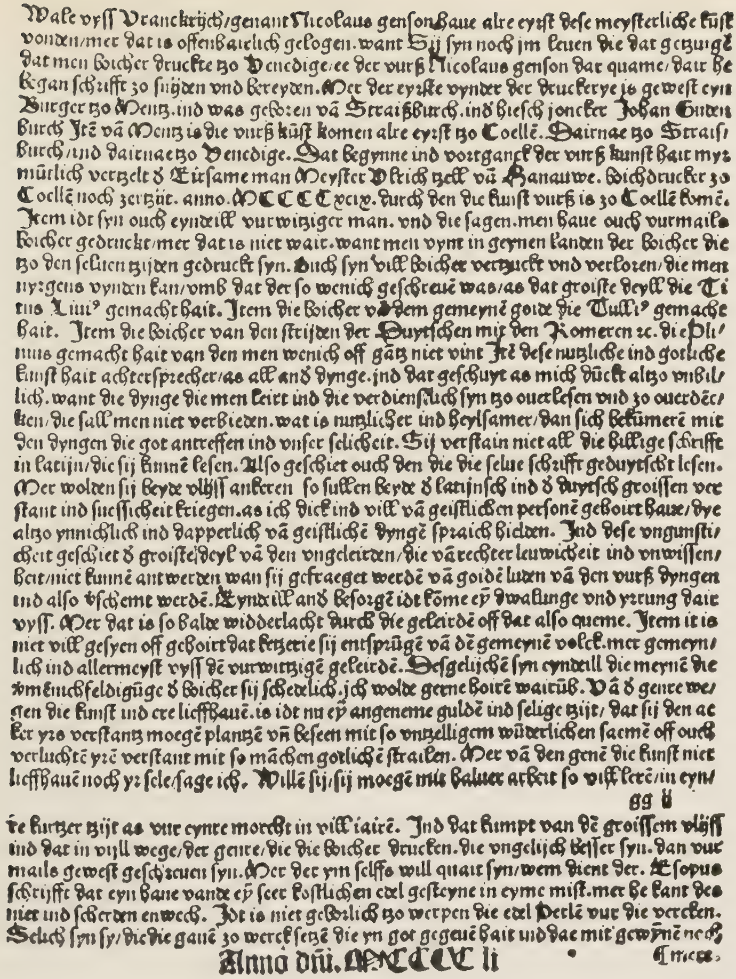


Van der boychdrucker kunſt.

Wanne. Wae. ind durch wen is vondē dye unuyſſprechlich kunſt boicher tzo drucken

Hye is tzo myrcken vlyſlich dat in den leſtē tzijden as die lieffde ind die vuyricheit der mynſchen ſere verloſſchen is off bevleckt/ nu mit ydel glorie/ nu mit gyricheit nu mit traicheit ꝛc. die ſonderlichen groiſlich zo ſtraiffen is in den Geiſtlichen. die vill me wachen vnd ſorchfeldich ſyn tzijtlich goit tzo vergaderen. vnd genoichde des vleyſchs tzo ſoichen dan ſelicheit der ſelen/ vnd dae durch dat gemeyn voulck in groyſſ yrrunge kumpt/ want Sy ſoichen alleyn tzijtlich goyt mit yren vurgengerē/ als weer gheyn ewich goit ind ewich levē hiernae. Vp dan dat dye verſuymlicheit der vurgenger. ind dat quait exempel ind die bevleckunge des gotz wortz. ind gemeyn aller predicantē die yre vnſedelich gijricheit dae inne laiſſen merkundē ind myrckē/ den goiden Criſten mynſchen niet ſo ſere hynderlich vnd ſchedelich were/ ind dat ſich niemantz entſchuldigen moichte/ hait d' ewige got vyſſ ſynre vnvyſſgrūtlicher wijſheit vperweckt die loveſam kunſt/ dat men nu boicher druckt/ ind die vermanichfeldiget ſo ſere/ dat eyn yeder mynſch mach den wech d' ſelicheit ſelffs leſen off hoerē leſen. Wat vnd winde ich mich zo ſchrijvē ind tzo vertzellen dat loff. den nutze/ die ſelicheit die vyſſ d' kunſt vntſprinckt ind vntſprūgen is/ die niet vyſſprechlich is/ dat myr getzugen alle die ſchrifft lieff havē. got geve idt ſyn leyen die duytſch kunnē leſen. off geleirde lude die latijnſcher ſpraich gebruychen/ off moenche off nōnen/ ind kurtzlich all gemeyn. O wye vill gebeder/ wye vntzellige innicheyden werden geſchepper ouermitz die gedruckdē boicher. Itē wye vill koeſtlicher vñ ſeliger vermanungē geſchien in den Predicatē Ind dat kumpt allit vyß der vurß Edeler kunſt Och wat groiſſer nutz ind ſelicheit/ off Sy willē/ kūpt dae vā den genē die/ die gedruckde boicher machen/ off bereyden helpen/ wie ouch dat ſyn mach. Ind den geluſte dae van tzo leſen d' mach ouerſyen dat boichelgȳ dat gemacht hait d' groiſſ beroempte Doctoir Johānes Gerſon/ De laude ſcriptorū. Itē dat boichelgyn dat gemacht hait d' geyſtlich vader ind Abt zo Spānheym her Johānes vā Trettenheym. Itē deſe hoichwyrdige kūſt vurß is vonden aller eyrſt in Duytſchlant tzo Mentz am Rijne. Ind dat is d' duytſcher nacion eyn groiſſe eirlicheit dat ſulche ſynrijche mynſchen ſyn dae tzo vyndē. Ind dat is geſchiet by den iairen vns heren/ anno dñi. MCCCCxl. ind vā der zijt an bis men ſchreve. l. wart vnderſoicht die kunſt ind wat dair zo gehoirt. Ind in den iairē vns heren do men ſchreyff. MCCCC l. do was eyn gulden iair/ do began men tzo drucken ind was dat eyrſte boich dat men druckde die Bybel zo latijn/ ind wart gedruckt mit eynre groiſſer ſchrifft. as is die ſchrifft dae men nu Myſſeboicher mit druckt. Item wiewail die kunſt is vonden tzo Mentz/ als vurß vp die wijſe/ als dan nu gemeynlich gebruicht wirt/ ſo is doch die eyrſte vurbyldung vonden in Hollant vyſſ den Donaten/ die dae ſelfft vur der tzijt gedruckt ſyn. Ind vā ind vyſſ den is genōmen dat begynne der vurß kunſt. ind is vill meyſterlicher ind ſubtilicher vonden dan die ſelve manier was/ vnd ye lenger ye mere kunſtlicher wurden. Item eynre genant Omnebonū der ſchrijfft in eynre vurrede vp dat boich Quintilianus genoempt. vnd ouch in anderen meir boicher/ dat eyn.

Pages from the "Cologne Chronicle" of 1499 containing the passage that refers to the invention of printing from movable types.



Wale vyſſ Vranckrijch/genant Nicolaus genſon haue alre eyrſt deſe meyſterliche kūſt
vonden/mer dat is offenbairlich gelogen. want Sij ſyn noch jm leuen die dat getzugē
dat men boicher druckte zo Venedige/ee der vurß Nicolaus genſon dar quame/ dair he
began ſchrifft zo ſnijden vnd bereyden. Mer der eyrſte vynder der druckerye is geweſt eyn
Burger zo Mentz. ind was geboren vā Straißburch. ind hieſch joncker Johan Guden
burch Itē vā Mentz is die vurß kūſt komen alre eyrſt zo Coellē. Dairnae zo Straiſ/
burch/ind dairnae zo Venedige. Dat begynne ind vortganck der vurß kunſt hait myr
mūtlich vertzelt d Eirſame man Meyſter Vlrich zell vā Hanauwe. boichdrucker zo
Coellē noch zertzijt. anno. MCCCCxcix. durch den die kunſt vurß is zo Coellē komē.
Item idt ſyn ouch eyndeill vurwitziger man. vnd die ſagen. men haue ouch vurmails
boicher gedruckt/mer dat is niet wair. want men vynt in geynen landen der boicher die
zo den ſeluen zijden gedruckt ſyn. Auch ſyn vill boicher vertzuckt vnd verloren/ die men
nyrgens vynden kan/vmb dat der ſo wenich geſchreuē was/as dat groiſte deyll die Ti
tus Liuiꝰ gemacht hait. Item die boicher vā dem gemeynē goide die Tulliꝰ gemacht
hait. Item die boicher van den ſtrijden der Duytſchen mit den Romeren ꝛc. die Pli/
nius gemacht hait van den men wenich off gātz niet vint Itē deſe nutzliche ind gotliche
kunſt hait achterſprecher/as all and dynge. ind dat geſchuyt as mich dūckt altzo vnbil/
lich. want die dynge die men leirt ind die verdienſtlich ſyn zo ouerleſen vnd zo ouerdēc/
ken/die ſall men niet verbieden. wat is nutzlicher ind heylſamer/dan ſich bekūmerē mit
den dyngen die got antreffen ind vnſer ſelicheit. Sij verſtain niet all die billige ſchrifft
in latijn/die ſij kunnē leſen. Alſo geſchiet ouch den die die ſelue ſchrifft geduytſcht leſen.
Mer wolden ſij beyde vlijſſ ankeren ſo ſullen beyde d latijnſch ind d duytſch groiſſen ver
ſtant ind ſueſſicheit kriegen. as ich dick ind vill vā geiſtlichen perſonē gehoirt haue/dye
altzo ynnichlich ind dapperlich vā geiſtlichē dyngē ſpraich hidden. Ind deſe vngunſti/
cheit geſchiet d groiſte deyl vā den vngeleirden/die vā rechter leuwicheit ind vnwiſſen/
heit/niet kunnē antwerden wan ſij gefraeget werdē vā goidē luden vā den vurß dyngen
ind alſo verſchemt werdē. Eyndeill and beſorgē idt kōme eyn dwalinge vnd yrrung dair
vyſſ. Mer dat is ſo balde widderlacht durch die geleirdē off dat alſo queme. Item it is
niet vill geſyen off gehoirt dat ketzerie ſij entſprūgē vā dē gemeynē volck. mer gemeyn/
lich ind allermeyſt vyſſ dē vurwitzigē geleirdē. Deſgelijchē ſyn eyndeill die meynē die
vmenichfeldigūge d boicher ſij ſchedelich. ich wolde gerne hoirē wairūb. Vā d gener we/
gen die kunſt ind ere lieff hauē. is idt nu eyn angeneme guldē ind ſelige tzijt/ dat ſij den ac
ker yrs verſtantz moegē plantzē vn̄ beſeen mit ſo vntzelligem wūderlichen ſaemē off ouch
verluchtē yrē verſtant mit ſo māchen gotlichē ſtrailen. Mer vā den genē die kunſt niet
lieff hauē noch yr ſele/ſage ich. Willē ſij/ſij moegē mit haluer arbeit ſo vill lerē/in eyn/

gg ii

re kurtzer tzijt as vur eyne mochte in vill iairē. Ind dat kumpt van dē groiſſem vlijſſ
ind dat in vill wege/der gener/die die boicher drucken. die vngelijch beſſer ſyn. dan vur
mails geweſt geſchreuen ſyn. Mer der ym ſelffs will quait ſyn/wem dient der. Eſopus
ſchrijfft dat eyn hane vande eyn ſeer koſtlichen edel geſteyne in eyme miſt. mer he kant des
niet ind ſcherden enwech. Idt is niet geburlich zo werpen die edel Perlē vur die verckē.
Selich ſyn ſy/die die gauē zo werck ſetzē die yn got gegeuē hait ind dae mit gewynnē noch

Anno dñi. MCCCCXC ii • Amen.

It was an account based on this passage that started the controversy between the Germans and the Dutch. From the copy in the New York Public Library.

same thing previously. In the case of both Schoeffer and Ther Hoernen the instances were isolated, the practice of regularly using title pages not being adopted until a later date.

Pollard notes that Ther Hoernen furnishes the first instance of a printer getting into touch with a contemporary author and regularly printing his works. The author was Werner Rolewinck, whose first book is mentioned above. Ther Hoernen printed fifteen of Rolewinck's books. The total number of his printed productions is 88.

John Koelhoff, father and son, were printers in Cologne almost from the beginning of the practice of the art there until well into the sixteenth century. Both as regards quantity and quality, Koelhoff the elder is in the front rank of Cologne printers. Between 1472 and 1493 he printed more than one hundred and fifty different editions. A study of his work leads to the belief that he must have learned his art in Venice. In the earliest of his books, Nider's *Praeceptorium Divinae Legis*, issued in 1472, he used for the first time printed signatures on the quires for the guidance of binders. Signature numbers had previously been put in by hand. Koelhoff's idea was immediately adopted by other printers.

The younger Koelhoff was the printer of the "Cologne Chronicle." He succeeded to his father's business in 1493, and 27 books have been attributed to his Press. Because of the freedom with which he criticized the clergy, he is said to have been imprisoned. Pollard quotes the statement that he left printing to go into the cattle trade.

Heinrich Quentell was one of the most prolific of the Cologne printers, his list totaling more than four hundred separate titles. An interesting fact in connection with Quentell's work is that in an edition of Aristotle's *Politics* printed by him in 1492 he used paper showing sixteen different watermarks.

According to Humphrey, it was Heinrich Quentell's son and successor, Peter Quentell of Cologne, who enjoyed the honor of printing William Tyndale's translation of the New Testament, the first portion of the Bible to be printed in English. Pollard, however, says that the name of the printer is unknown. Being put into type by German compositors who did not understand the English language, the book contained many misprints, but otherwise the printing was well done. The wood-engravings are commendable.

Three thousand copies of Tyndale's New Testament are supposed to have been printed, and when sent to England they were eagerly bought. Tyndale was in disfavor with the established church, and his work met with ecclesiastical condemnation. Bishop Tunstal issued a commission to the archdeacons of his Diocese of London in which, as quoted by Humphrey, he said: "Some sons of iniquity, and ministers of the Lutheran faction, have craftily translated the Holy Gospel of God into our vulgar English, and mixed with their translations some articles of heretical pravity." All copies were ordered seized and delivered to the Bishop, and no complete copy is now known to be in existence. Tyndale and Fryth and Roye, his assistants in the translation of the New Testament, were arrested and thrown into prison and later burned at the stake.

Nicolaus Gotz was a Cologne printer who was responsible for a number of innovations. His *Fasciculus Temporum*, written by Werner Rolewinck and printed in 1474, was the first book with pagination, the first book in which a metal-cut illustration was used, and the first book printed at Cologne with illustrations other than a printer's device. Gotz learned his craftsmanship either at Mainz, where he is known to have been in 1461, or at Strasbourg under Mentelin. He matriculated at the University of Cologne in order to obtain the privileges of the University for his work.

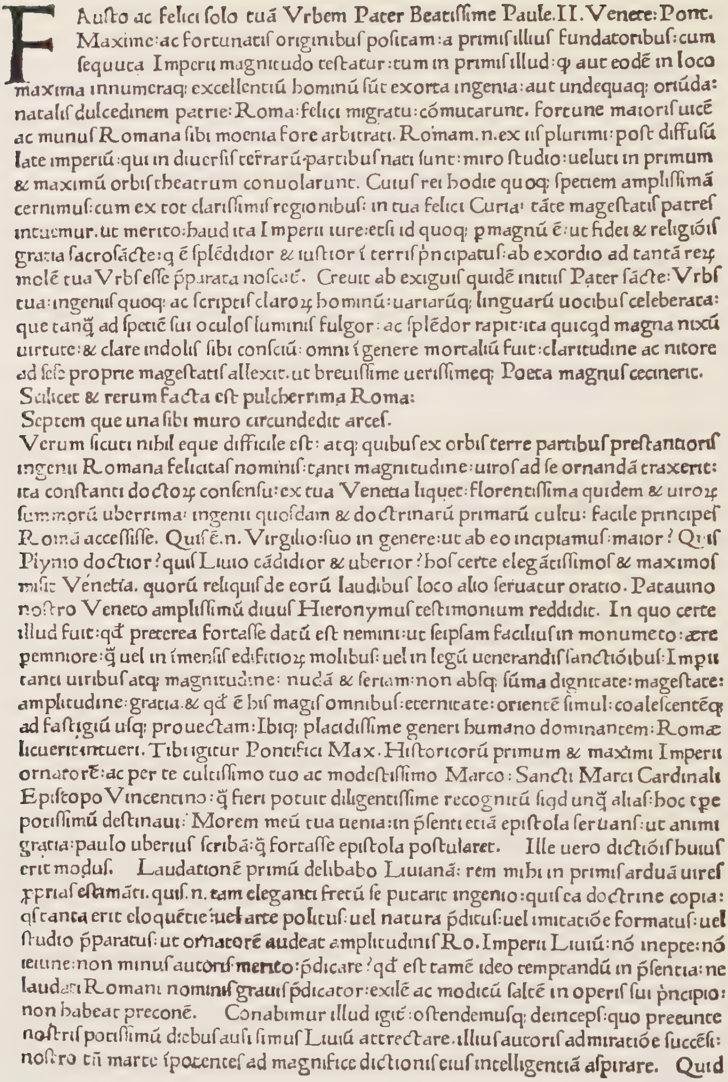
Probably thirty printers operated establishments during the latter third of the fifteenth century in Cologne, but the names of many of them are unknown to this day.

CHAPTER VIII

THE FIRST PRINTERS IN ITALY

IT was to be expected that printing would find its way also over the Alps into Italy, then regarded throughout Europe as the seat of religion and learning and famed for its wealth and patronage of the arts. The nationality of the early printers in Italy is about evenly divided between German and Italian, with the Germans furnishing the craftsmanship and the Italians the capital required.

If we are to disregard the claim sometimes made by Italian writers (and there seems to be good reason to disregard it) that Pampilo Castaldi of Feltre was an independent inventor of the art of printing from movable types, we may begin the account of printing in Italy with the statement that the first printing establishment south of the Alps was set up in 1464. So rapid was the growth of the art that by the end of the century 73 Italian towns and cities possessed presses, and the number of separate and distinct type fonts that had been cast is given by Proctor as 1,680. Proctor's identification does not include unknown printers and places or printers who did not make their own types. Thirty-eight printers are known to have been practicing their art in the year 1500 in Rome alone, and their production up to that time is estimated to have embraced a thousand distinct titles.



FAuſto ac felici ſolo tuã Vrbem Pater Beatiſſime Paule.II.Venete: Pont. Maxime: ac fortunatiſ originibuſ poſitam: a primiſ illiuſ fundatoribuſ: cum ſequuta Imperii magnitudo teſtatur: tum in primiſ illud: ꝙ aut eodẽ in loco maxima innumeraq; excellentiũ hominũ ſũt exorta ingenia: aut undequaq; oriũda: nataliſ dulcedinem patrie: Roma: felici migratu: cõmutarunt. fortune maioriſ uicẽ ac munuſ Romana ſibi moenia fore arbitrati. Romam.n.ex iiſ plurimi: poſt diffuſũ late imperiũ: qui in diuerſiſ terrarũ partibuſ nati ſunt: miro ſtudio: ueluti in primum & maximũ orbiſ theatrum conuolarunt. Cuiuſ rei hodie quoq; ſpeciem ampliſſimã cernimuſ: cum ex tot clariſſimiſ regionibuſ: in tua felici Curia tãte mageſtatiſ patreſ intuemur. ut merito: haud ita Imperii iure: etſi id quoq; ꝑmagnũ ẽ: ut fidei & religiõiſ gratia ſacroſãcte: q ẽ ſplẽdidior & iuſtior ĩ terriſ p̄ncipatuſ: ab exordio ad tantã reꝝ molẽ tua Vrbſ eſſe p̄parata noſcat̃. Creuit ab exiguiſ quidẽ initiiſ Pater ſãcte: Vrbſ tua: ingeniiſ quoq; ac ſcriptiſ claroꝝ hominũ: uariarũq; linguarũ uocibuſ celeberata: que tanq̃ ad ſpeciẽ ſui oculoſ luminiſ fulgor: ac ſplẽdor rapit: ita quicqd magna nixũ uirtute: & clare indoliſ ſibi conſciũ: omni ĩ genere mortaliũ fuit: claritudine ac nitore ad ſeſe proprie mageſtatiſ allexit. ut breuiſſime ueriſſimeq; Poeta magnuſ cecinerit.

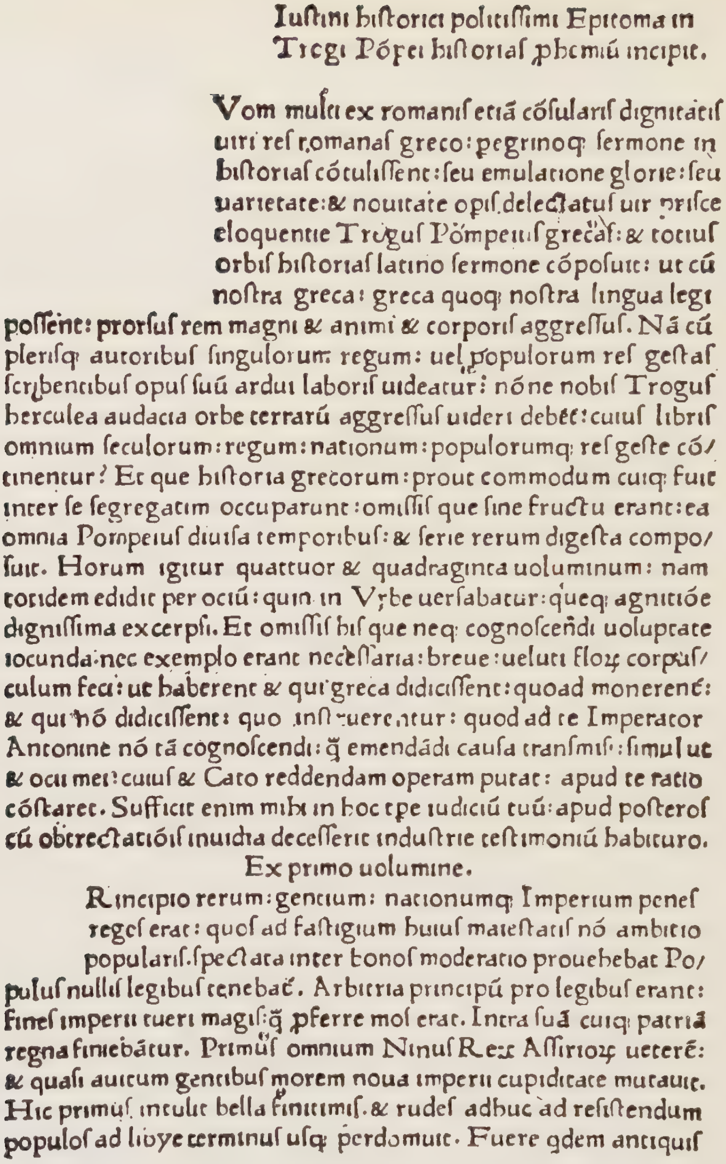
Scilicet & rerum facta eſt pulcherrima Roma:
Septem que una ſibi muro circundedit arceſ.

Verum ſicuti nihil eque difficile eſt: atq; quibuſ ex orbiſ terre partibuſ preſtantioriſ ingenii Romana felicitaſ nominiſ: tanti magnitudine: uiroſ ad ſe ornandã traxerit: ita conſtanti doctoꝝ conſenſu: ex tua Venetia liquet: florentiſſima quidem & uiroꝝ ſummorũ uberrima: ingenii quoſdam & doctrinarũ primarũ cultu: facile principeſ Romã acceſſiſſe. Quiſ ẽ.n. Virgilio: ſuo in genere: ut ab eo incipiamuſ: maior? Quiſ Plynio doctior? quiſ Liuio cãdidior & uberior? hoſ certe elegãtiſſimoſ & maximoſ miſit Venetia. quorũ reliquiſ de eorũ laudibuſ loco alio ſeruatur oratio. Patauino noſtro Veneto ampliſſimũ diuuſ Hieronymuſ teſtimonium reddidit. In quo certe illud fuit: qđ preterea fortaſſe datũ eſt nemini: ut ſeipſam faciliuſ in monumeto: ære ꝑenniore: q̃ uel in imenſiſ edifitioꝝ molibuſ: uel in legũ uenerandiſ ſanctiõibuſ: Imꝑii tanti uiribuſ atq; magnitudine: nudã & ſeriam: non abſq; ſũma dignitate: mageſtate: amplitudine: gratia. & qđ ẽ hiſ magiſ omnibuſ: eternitate: orientẽ ſimul: coaleſcentẽq; ad faſtigiũ uſq; prouectam: Ibiq; placidiſſime generi humano dominantem: Romæ licuerit intueri. Tibi igitur Pontifici Max. Hiſtoricorũ primum & maximi Imperii ornatorẽ: ac per te cultiſſimo tuo ac modeſtiſſimo Marco: Sancti Marci Cardinali Epiſcopo Vincentino: q̃ fieri potuit diligentiſſime recognitũ ſiqd unq̃ aliaſ: hoc tp̄e potiſſimũ deſtinaui. Morem meũ tua uenia: in p̄ſenti etiã epiſtola ſeruanſ: ut animi gratia: paulo uberiuſ ſcribã: q̃ fortaſſe epiſtola poſtularet. Ille uero dictiõiſ huiuſ erit moduſ. Laudationẽ primũ delibabo Liuianã: rem mihi in primiſ arduã uireſ ꝓpriaſ eſtimãti. quiſ.n. tam eleganti fretũ ſe putarit ingenio: quiſ ea doctrine copia: qſ tanta erit eloquẽtie: uel arte polituſ: uel natura p̄dituſ: uel imitatiõe formatuſ: uel ſtudio p̄paratuſ: ut ornatorẽ audeat amplitudiniſ Ro. Imperii Liuiũ: nõ inepte: nõ ieiune: non minuſ autoriſ merito: p̄dicare? qđ eſt tamẽ ideo temptandũ in p̄ſentia: ne laudati Romani nominiſ grauiſ p̄dicator: exilẽ ac modicũ ſaltẽ in operiſ ſui p̄ncipio: non habeat preconẽ. Conabimur illud igit̃: oſtendemuſq; deincepſ: quo preeunte noſtriſ potiſſimũ diebuſ auſi ſimuſ Liuiũ attrectare. illiuſ autoriſ admiratiõe ſuccẽſi: noſtro tñ marte ĩpotenteſ ad magnificẽ dictioniſ eiuſ intelligentiã aſpirare. Quid

Page from Livy's *History of Rome*. Printed by Sweynheym and Pannartz, Rome, 1469.

Subiaco, a village about fifty miles from Rome, was the scene of the first printing done in Italy. In Subiaco was located the Benedictine Monastery of St. Scholastica, presided over during the latter part of the fifteenth century by Juan Turrecremata, abbot and later cardinal. Among the monks in the monastery were some from Germany, and from them the Abbot learned of the new art of printing. It was doubtless through their agency that two printers, Conrad Sweynheym of Mainz and Arnold Pannartz of Prague, both of whom are believed to have been employed by Fust and Schoeffer at Mainz, were engaged to set up a Press at Subiaco. Their first production was a schoolbook, "the cruel little Latin grammar which passed under the name of *Donatus*," Pollard calls it, which appeared in 1464 but which was printed without date. No copy of this book has been preserved, but the fact of its existence is attested by the inclusion of its title in a list of the printers' productions drawn up in 1472. They produced only three other books at Subiaco and then removed to Rome, where they issued their first work in 1467. The second book printed at Subiaco was Cicero's *De Oratore*, a large quarto of 109 leaves, 30 lines to the page, with irregular line endings. It was printed two pages at a time, and the work was beautifully done.

Sweynheym and Pannartz used in Subiaco types of a modified German design which did not meet with favor on the part of Italian readers. When they removed to Rome, they designed new types of Roman



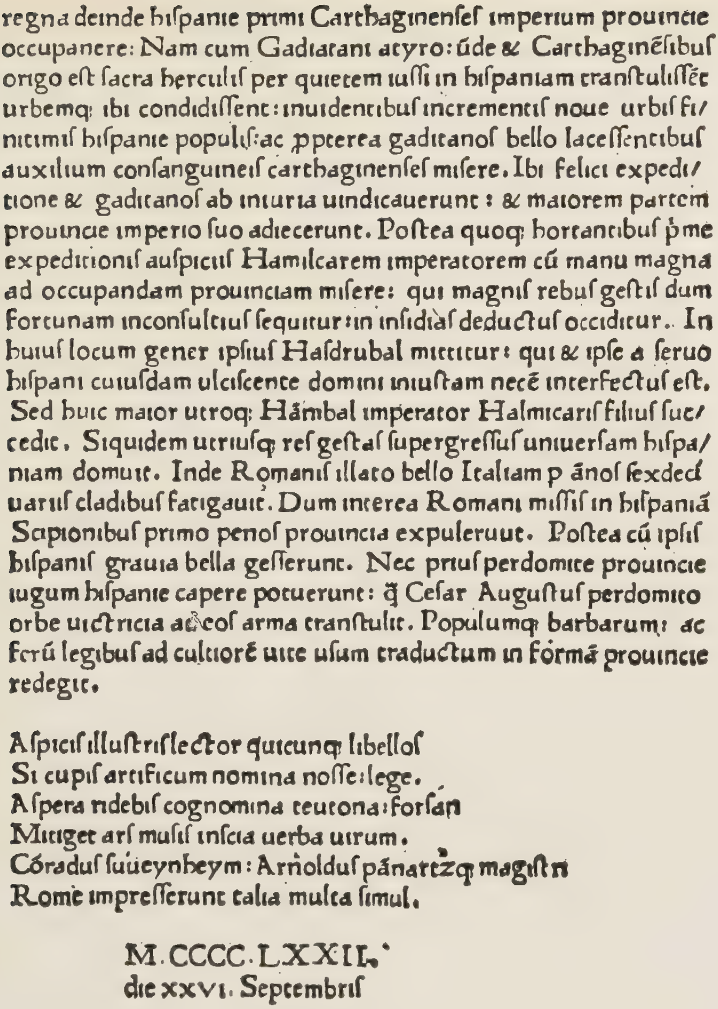
Iuſtini hiſtorici politiſſimi Epitoma in Trogi Pōpei hiſtoriaſ ꝓhemiū incipit.

Vom multi ex romaniſ etiā cōſulariſ dignitatiſ uiri reſ romanaſ greco: ꝑegrinoq; ſermone in hiſtoriaſ cōtuliſſent: ſeu emulatione glorie: ſeu uarietate: & nouitate opiſ. delectatuſ uir priſce eloquentie Troguſ Pōmpeiuſ grecaſ: & totiuſ orbiſ hiſtoriaſ latino ſermone cōpoſuit: ut cū noſtra greca: greca quoq; noſtra lingua legi poſſent: prorſuſ rem magni & animi & corporiſ aggreſſuſ. Nā cū pleriſq; autoribuſ ſingulorum regum: uel populorum reſ geſtaſ ſcribentibuſ opuſ ſuū ardui laboriſ uideatur: nōne nobiſ Troguſ herculea audacia orbe terrarū aggreſſuſ uideri debet: cuiuſ libriſ omnium ſeculorum: regum: nationum: populorumq; reſ geſte cōtinentur? Et que hiſtoria grecorum: prout commodum cuiq; fuit inter ſe ſegregatim occuparunt: omiſſiſ que ſine fructu erant: ea omnia Pompeiuſ diuiſa temporibuſ: & ſerie rerum digeſta compoſuit. Horum igitur quattuor & quadraginta uoluminum: nam totidem edidit per ociū: quin in Vrbe uerſabatur: queq; agnitiōe digniſſima excerpſi. Et omiſſiſ hiſ que neq; cognoſcēdi uoluptate iocunda: nec exemplo erant neceſſaria: breue: ueluti floꝝ corpuſculum feci: ut haberent & qui greca didiciſſent: quoad monerent: & qui nō didiciſſent: quo inſtruerentur: quod ad te Imperator Antonine nō tā cognoſcendi: q̄ emendādi cauſa tranſmiſi: ſimul ut & ocii mei: cuiuſ & Cato reddendam operam putat: apud te ratio cōſtaret. Sufficit enim mihi in hoc tpe iudiciū tuū: apud poſteroſ cū obtrectatiōiſ inuidia deceſſerit induſtrie teſtimoniū habituro.

Ex primo uolumine.

Rincipio rerum: gentium: nationumq; Imperium peneſ regeſ erat: quoſ ad faſtigium huiuſ maieſtatiſ nō ambitio populariſ. ſpectata inter bonoſ moderatio prouehebat. Populuſ nulliſ legibuſ tenebat. Arbitria principū pro legibuſ erant: fineſ imperii tueri magiſ: q̄ ꝓferre moſ erat. Intra ſuā cuiq; patriā regna finiebātur. Primuſ omnium Ninuſ Rex Aſſirioꝝ ueterē: & quaſi auitum gentibuſ morem noua imperii cupiditate mutauit. Hic primuſ intulit bella finitimiſ. & rudeſ adhuc ad reſiſtendum populoſ ad libye terminuſ uſq; perdomuit. Fuere qdem antiquiſ

First page of Justinus' *Abridged History*. Printed by Sweynheym and Pannartz, Rome, 1472.

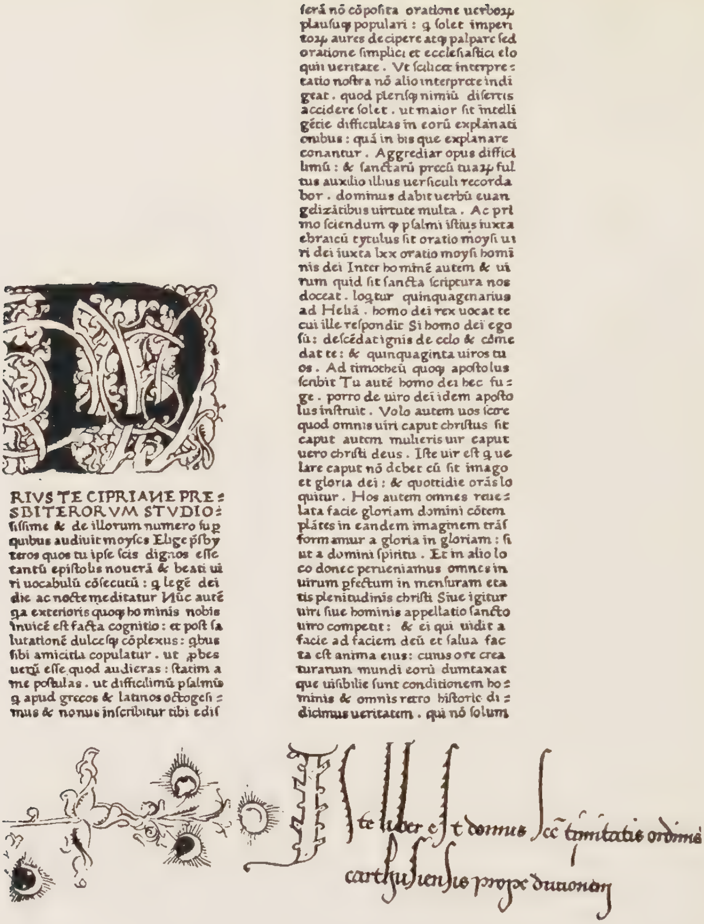


regna deinde hiſpanie primi Carthaginenſeſ imperium prouincie occupauere: Nam cum Gaditani a tyro: ũde & Carthaginẽſibuſ origo eſt ſacra herculiſ per quietem iuſſi in hiſpaniam tranſtuliſſẽt urbemq; ibi condidiſſent: inuidentibuſ incrementiſ noue urbiſ finitimiſ hiſpanie populiſ: ac ꝓpterea gaditanoſ bello laceſſentibuſ auxilium conſanguineiſ carthaginenſeſ miſere. Ibi felici expeditione & gaditanoſ ab iniuria uindicauerunt: & maiorem partem prouincie imperio ſuo adiecerunt. Poſtea quoq; hortantibuſ p̄me expeditioniſ auſpiciiſ Hamilcarem imperatorem cũ manu magna ad occupandam prouinciam miſere: qui magniſ rebuſ geſtiſ dum fortunam inconſultiuſ ſequitur: in inſidiaſ deductuſ occiditur. In huiuſ locum gener ipſiuſ Haſdrubal mittitur: qui & ipſe a ſeruo hiſpani cuiuſdam ulciſcente domini iniuſtam necẽ interfectuſ eſt. Sed huic maior utroq; Hãnibal imperator Halmicariſ filiuſ ſuccedit. Siquidem utriuſq; reſ geſtaſ ſupergreſſuſ uniuerſam hiſpaniam domuit. Inde Romaniſ illato bello Italiam p ãnoſ ſexdecĩ uariiſ cladibuſ fatigauit. Dum interea Romani miſſiſ in hiſpaniã Scipionibuſ primo penoſ prouincia expuleruut. Poſtea cũ ipſiſ hiſpaniſ grauia bella geſſerunt. Nec priuſ perdomite prouincie iugum hiſpanie capere potuerunt: q̃ Ceſar Auguſtuſ perdomito orbe uictricia ad eoſ arma tranſtulit. Populumq; barbarum: ac ferũ legibuſ ad cultiorẽ uite uſum traductum in formã prouincie redegit.

Aſpiciſ illuſtriſ lector quicunq; libelloſ
Si cupiſ artificum nomina noſſe: lege.
Aſpera ridebiſ cognomina teutona: forſan
Mitiget arſ muſiſ inſcia uerba uirum.
Cõraduſ ſuueynheym: Arnolduſ pãnartzq; magiſtri
Rome impreſſerunt talia multa ſimul.

M.CCCC.LXXII.
die XXVI. Septembriſ

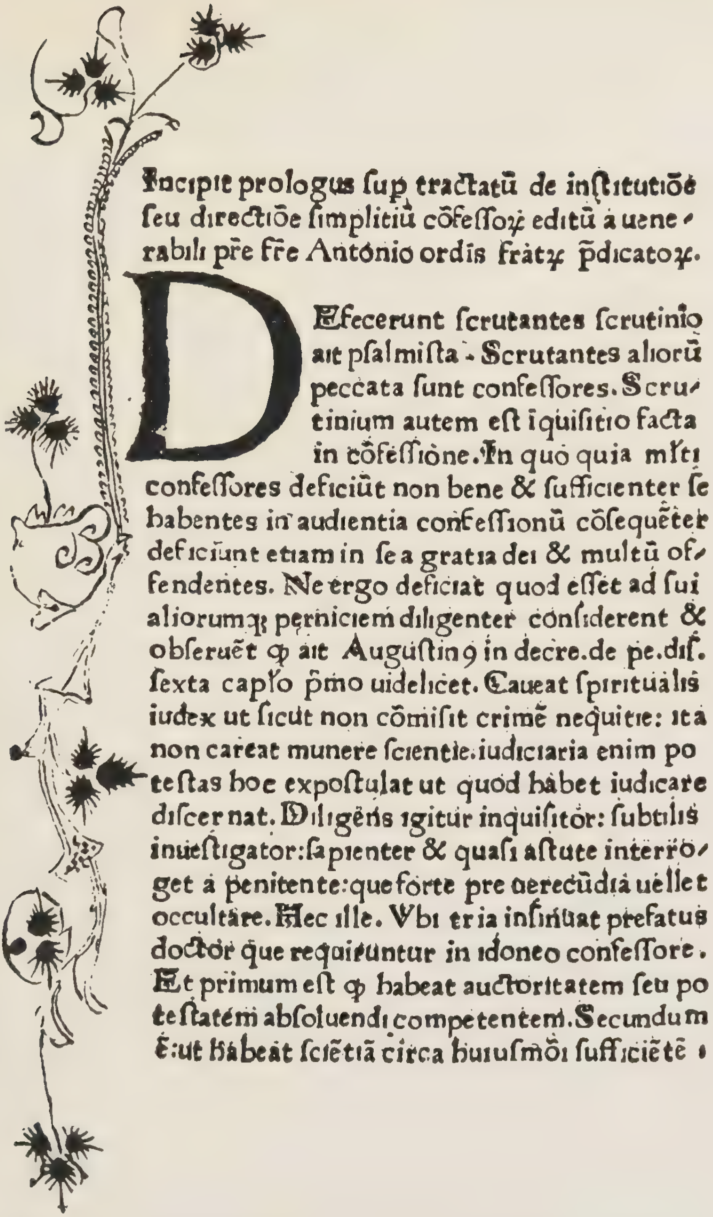
Last page, containing colophon, of Sweynheym and Pannartz's edition of Justinus' *Abridged History.*



RIVS TE CIPRIANE PRE=
SBITERORVM STVDIO=
ſiſſime & de illorum numero ſup
quibus audiuit moyſes Elige pſ̄by
teros quos tu ipſe ſcis dignos eſſe
tantū epiſtolis nouerā & beati ui
ri uocabulū cōſecutū : ꝗ legē dei
die ac nocte meditatur Nūc autē
q̄a exterioris quoqꝫ hominis nobis
inuicē eſt facta cognitio : et poſt ſa
lutationē dulceſqꝫ cōplexus : q̄bus
ſibi amicitia copulatur . ut ꝓbes
uerū eſſe quod audieras : ſtatim a
me poſtulas . ut difficilimū pſalmū
ꝗ apud grecos & latinos octogeſi=
mus & nonus inſcribitur tibi ediſ
ſerā nō cōpoſita oratione uerboꝝ
plauſuqꝫ populari : ꝗ ſolet imperi
toꝝ aures decipere atqꝫ palpare ſed
oratione ſimplici et eccleſiaſtica elo
quii ueritate . Vt ſcilicet interpre=
tatio noſtra nō alio interprete indi
geat . quod pleriſqꝫ nimiū diſertis
accidere ſolet . ut maior ſit intelli
gētie difficultas in eorū explanati
onibus : quā in his que explanare
conantur . Aggrediar opus diffici
limū : & ſanctarū precū tuaꝝ ful
tus auxilio illius uerſiculi recorda
bor . dominus dabit uerbū euan
gelizātibus uirtute multa . Ac pri
mo ſciendum ꝙ pſalmi iſtius iuxta
ebraicū tytulus ſit oratio moyſi ui
ri dei iuxta lxx oratio moyſi homī
nis dei Inter hominē autem & ui
rum quid ſit ſancta ſcriptura nos
doceat . loq̄tur quinquagenarius
ad Heliā . homo dei rex uocat te
cui ille reſpondit Si homo dei ego
ſū : deſcēdat ignis de celo & cōme
dat te : & quinquaginta uiros tu
os . Ad timotheū quoqꝫ apoſtolus
ſcribit Tu autē homo dei hec fu=
ge . porro de uiro dei idem apoſto
lus inſtruit . Volo autem uos ſcire
quod omnis uiri caput chriſtus ſit
caput autem mulieris uir caput
uero chriſti deus . Iſte uir eſt ꝗ ue
lare caput nō debet cū ſit imago
et gloria dei : & quottidie orās lo
quitur . Hos autem omnes reue=
lata facie gloriam domini cōtem
plātes in eandem imaginem trāſ
formamur a gloria in gloriam : ſi
ut a domini ſpiritu . Et in alio lo
co donec perueniamus omnes in
uirum ꝑfectum in menſuram eta
tis plenitudinis chriſti Siue igitur
uiri ſiue hominis appellatio ſancto
uiro competit : & ei qui uidit a
facie ad faciem deū et ſalua fac
ta eſt anima eius : cuius ore crea
turarum mundi eorū dumtaxat
que uiſibilie ſunt conditionem ho=
minis & omnis retro hiſtorie di=
dicimus ueritatem . qui nō ſolum

Iſte liber eſt domus ſcē trinitatis ordinis
carthuſienſis prope diuionem

First page of St. Hieronymus' *Epistles*. Printed by Sixtus Reissinger, Rome, undated.



Incipit prologus ſup tractatū de inſtitutiōe ſeu directiōe ſimplitiū cōfeſſoꝝ editū a uenerabili pr̄e fr̄e Antonio ordīs fratꝝ p̄dicatoꝝ.

DEfecerunt ſcrutantes ſcrutinio ait pſalmiſta. Scrutantes aliorū peccata ſunt confeſſores. Scrutinium autem eſt īquiſitio facta in cōfeſſiōne. In quo quia mlti confeſſores deficiūt non bene & ſufficienter ſe habentes in audientia confeſſionū cōſequēter deficiunt etiam in ſe a gratia dei & multū offendentes. Ne ergo deficiat quod eſſet ad ſui aliorumqꝫ perniciem diligenter conſiderent & obſeruēt ꝙ ait Auguſtinꝰ in decre. de pe. diſ. ſexta caplo p̄mo uidelicet. Caueat ſpiritualis iudex ut ſicut non cōmiſit crimē nequitie: ita non careat munere ſcientie. iudiciaria enim poteſtas hoc expoſtulat ut quod habet iudicare diſcernat. Diligēs igitur inquiſitor: ſubtilis inueſtigator: ſapienter & quaſi aſtute interroget a penitente: que forte pre uerecūdia uellet occultare. Hec ille. Vbi tria inſinuat prefatus doctor que requiruntur in idoneo confeſſore. Et primum eſt ꝙ habeat auctoritatem ſeu poteſtatem abſoluendi competentem. Secundum ē: ut habeat ſciētiā circa huiuſmōi ſufficiētē.

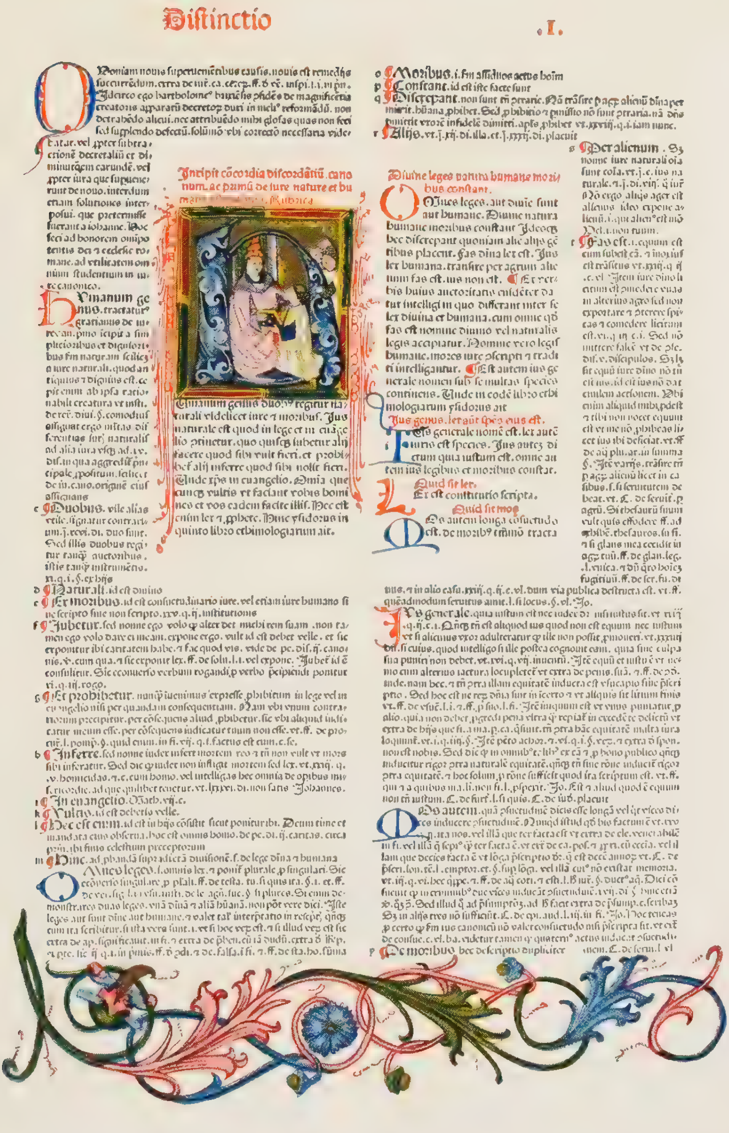
First page of *Summa Confessiones.* Printed by George Lauer, Rome, 1472. In its colophon he gives credit to the proofreader, Celestinus, probably a monk.

character distinguished by the use of the long *ſ*, after the manner of Italian manuscripts of the period.

Sweynheym and Pannartz continued to print until the end of 1473, their final book being dated the last day of that year. The list of their books above referred to was included in a letter addressed to Pope Sixtus IV setting forth their accomplishments and appealing for financial relief from the difficulties in which they found themselves. Possibly an explanation of their financial troubles is to be found in the statement of the Bishop of Aleria, the Pope's librarian and their co-worker and patron, in his preface to the *Ciceronis Epistolae ad Atticum* of 1470, that they produced their editions *ad pauperum commoditatum* (at the lowest possible price).

Evidently the appeal was unsuccessful, for the firm was dissolved. Sweynheym became an engraver of maps, and Pannartz set himself up as a printer on a smaller scale. The firm issued in Subiaco and Rome 52 different books, and Pannartz produced another twelve during the three years between 1473, when he began to print for himself, and 1476, the year of his death. Pannartz's death came in the midst of his production of a new edition in two volumes of the *Letters of St. Jerome*, of which he printed only the first volume. The second was printed by George Lauer in the same type.

It is not certain whether the distinction of being the earliest printer in Rome belongs to the firm of Sweynheym and Pannartz or to Ulrich Han, who



First page of St. Thomas Aquinas' *Questiones*. Printed by George Lauer, Rome, undated. Probably 1470. (Reduced.)

came from Vienna but was a native of Bavaria. Han issued in Rome in 1467, the same year in which Sweynheym and Pannartz began there, an edition of Turrecremata's *Meditationes de Vita Christi*, the first illustrated book to be printed in Italy. He continued to print until 1478, the year of his death. In the colophons of his books he used the latinized form of his name, "Gallus" (a cock). He made a pun upon this meaning of the word, alluding to the legendary geese who saved Rome by their cackling and telling their descendants that "the time of vengeance was now arrived, as a Gallus had come to Rome who would make them superfluous by printing in a single day as much as could be written with any goose quill in the course of a year" (Pollard).

Ulrich Han concluded as he had begun, his last work being again Turrecremata's *Meditationes de Vita Christi*. During his ten years of activity he produced about eighty works. He was active as a type-designer also, casting seven different fonts. His first book was printed in type of Gothic design. In his second and succeeding works he used what De Vinne calls "a rude form of Gothic types."

Sixtus Reissinger is the name of a German who is supposed to have printed in Rome as early as 1467, but the record is not definite. He began in Naples in 1471. He has been designated a "typographical puzzle."

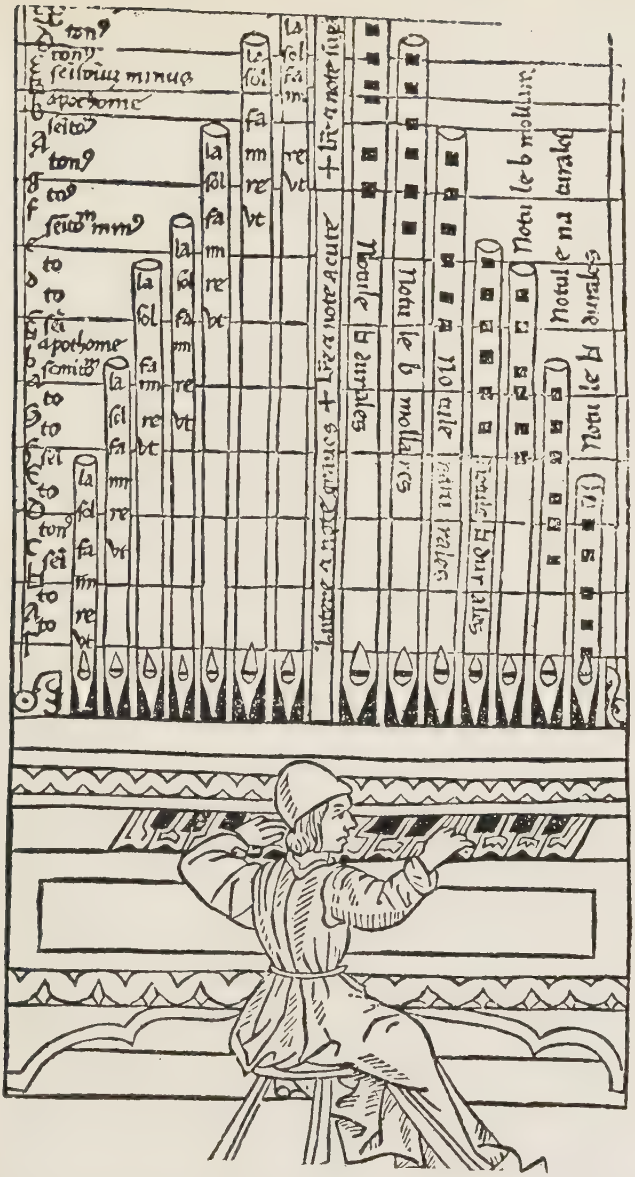
George Lauer, who was born in Wurzburg, began to print in the Eusebian Monastery in Rome probably in 1470, although no book by him is dated earlier than 1471. He operated for about a dozen years, part of the time alone and part in association with Leonardhus Pflügl, another German printer, producing about sixty books. After separating from Pflügl he continued alone until 1481.

The colophon of Lauer's earliest dated book, *Summa Confessiones*, reads in part:

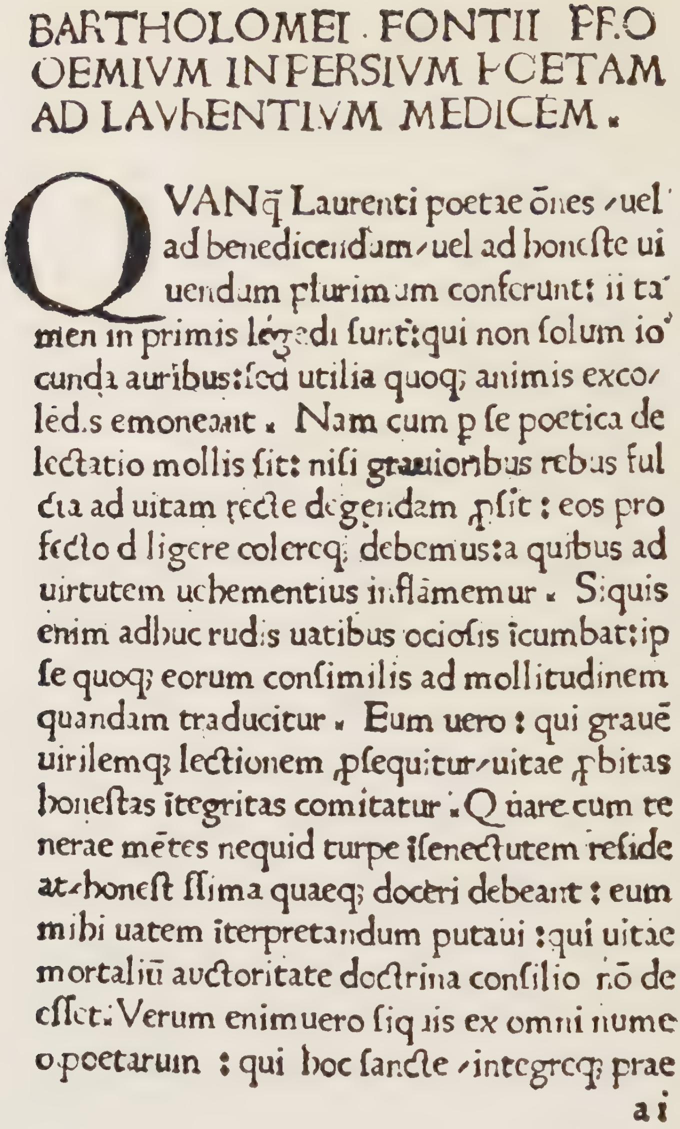
> This simple compendium of Antoninus from the divine law is not abbreviated and is also not given in a false way. It was corrected by diligent study by one called Celestinus, living in the monastery of St. Eusebius, a duster in action [one who clears away doubts and obscurity]. Printed in 1472 by George Lauer, then living in Rome, but born in Wurzburg, under the Pontificate of Pope Sixtus the Fourth.

Stephen Plannck succeeded to the business of Ulrich Hahn. In number of productions he was the most prolific printer in Rome, and one of the most prolific in Europe during the fifteenth century. In his twenty-one years of production his output numbered some three hundred editions. Another German printer, Eucharius Silber, during the years 1480 to 1509 produced in Rome more than two hundred editions.

A notable exception to the rule of German names in early Roman printing is provided by John Philip de Lignamine, a Sicilian, who produced his first book in August, 1470. He continued to print, with periods of inactivity, for sixteen years, producing about forty books. John Philip made interesting contributions to the literature of printing in his colophons, which give



Page from a book on the theory of music printed by Francesco de Dino Fiorentino, Naples, 1480. It shows the earliest typographic reproduction of music.

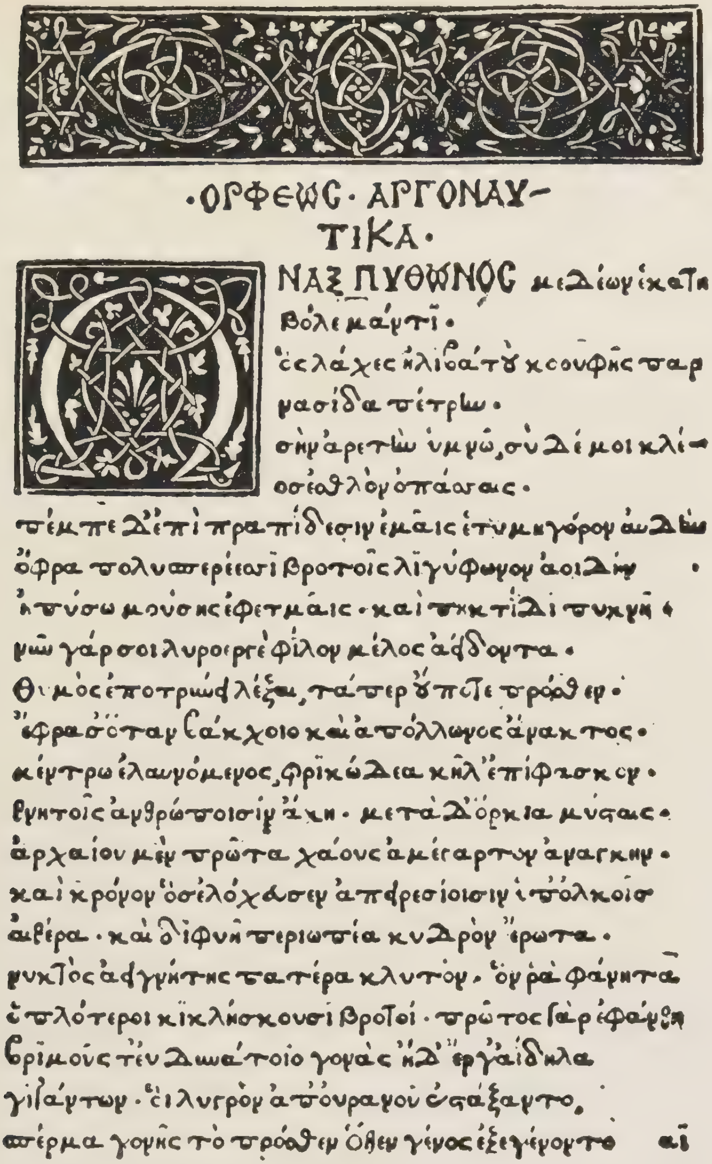


BARTHOLOMEI . FONTII PRO
OEMIVM IN PERSIVM POETAM
AD LAVRENTIVM MEDICEM .

QVANq̄ Laurenti poetae ōnes /uel ad benedicendum/uel ad honeſte uiuendum plurimum conferunt: ii tamen in primis legēdi ſunt: qui non ſolum iocunda auribus: ſed utilia quoq; animis excolēdis emoneant. Nam cum ꝑ ſe poetica delectatio mollis ſit: niſi grauioribus rebus fulcita ad uitam recte degendam ꝓſit: eos profecto diligere colereq; debemus: a quibus ad uirtutem uehementius inflāmemur. Siquis enim adhuc rudis uatibus ocioſis īcumbat: ipſe quoq; eorum conſimilis ad mollitudinem quandam traducitur. Eum uero: qui grauē uirilemq; lectionem ꝓſequitur/uitae ꝓbitas honeſtas ītegritas comitatur. Quare cum tenerae mētes nequid turpe īſenectutem reſideat/honeſtiſſima quaeq; doceri debeant: eum mihi uatem īterpretandum putaui: qui uitae mortaliū auctoritate doctrina conſilio nō deeſſet. Verum enimuero ſiquis ex omni numero poetarum: qui hoc ſancte/integreq; prae

a i

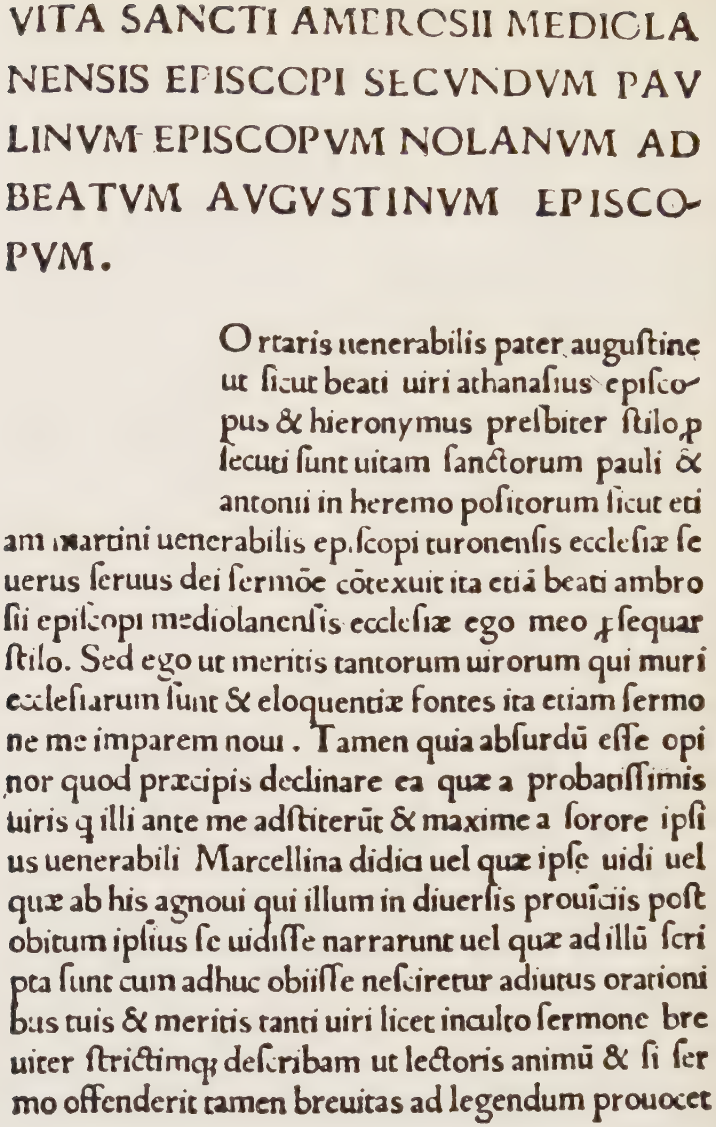
Page from *Commentum* printed at the convent of San Jacopo di Ripoli, Florence, 1477. The type was set by nuns, assisted by male printers. Earliest known printing by women.



·ΟΡΦΕΩϹ· ΑΡΓΟΝΑΥΤΙΚΑ·

ΩΝΑΞ ΠΥΘΩΝΟϹ μεδέων ἑκατηβόλε μάντι·
ὃς λάχες ἠλίβατον κορυφῆς παρνασίδα πέτρην·
σὴν ἀρετὴν ὑμνῶ, σὺ δέ μοι κλέος ἐσθλὸν ὀπάσσαις·
πέμπε δ' ἐπὶ πραπίδεσσιν ἐμαῖς ἐτυμηγόρον αὐδὴν
ὄφρα πολυσπερέεσσι βροτοῖς λιγύφθογγον ἀοιδὴν ·
ἠπύσω μούσης ἐφετμαῖς· καὶ πηκτίδι πυκνῇ·
νῦν γάρ σοι λυροεργὲ φίλον μέλος ἀείδοντα·
θυμὸς ἐποτρύνει λέξαι, τάπερ οὔποτε πρόσθεν·
ἔφρασ' ὅτ' ἂν βάκχοιο καὶ ἀπόλλωνος ἄνακτος·
κέντρῳ ἐλαυνόμενος, φρικώδεα κῆλ' ἐπίφασκον·
θνητοῖς ἀνθρώποισιν ἄκη· μετὰ δ' ὄρκια μύσταις·
ἀρχαίου μὲν πρῶτα χάους ἀμέγαρτον ἀνάγκην·
καὶ κρόνον ὃς ἐλόχευσεν ἀπειρεσίοισιν ὑπ' ὁλκοῖς
αἰθέρα· καὶ διφυῆ περιωπέα κυδρὸν ἔρωτα·
νυκτὸς ἀειγνήτης πατέρα κλυτόν· ὅν ῥα φάνητα
ὁπλότεροι κικλήσκουσι βροτοί· πρῶτος γὰρ ἐφάνθη·
βριμοῦς τ' εὐδυνάτοιο γονὰς ἠδ' ἔργ' ἀΐδηλα
γιγάντων· οἳ λυγρὸν ἀπ' οὐρανοῦ ἐστάξαντο,
σπέρμα γονῆς τὸ πρόσθεν ὅθεν γένος ἐξεγένοντο   αἱ

First page of *Argonautica et Hymni*. Printed by Bartolommeo di Francesco di Libri, Florence, 1500.



VITA SANCTI AMBROSII MEDIOLANENSIS EPISCOPI SECVNDVM PAVLINVM EPISCOPVM NOLANVM AD BEATVM AVGVSTINVM EPISCOPVM.

Ortaris uenerabilis pater auguſtine ut ſicut beati uiri athanaſius epiſcopus & hieronymus preſbiter ſtilo ꝑſecuti ſunt uitam ſanctorum pauli & antonii in heremo poſitorum ſicut etiam martini uenerabilis epiſcopi turonenſis eccleſiæ ſeuerus ſeruus dei ſermōe cōtexuit ita etiā beati ambroſii epiſcopi mediolanenſis eccleſiæ ego meo ꝓſequar ſtilo. Sed ego ut meritis tantorum uirorum qui muri eccleſiarum ſunt & eloquentiæ fontes ita etiam ſermone me imparem noui. Tamen quia abſurdū eſſe opinor quod præcipis declinare ea quæ a probatiſſimis uiris q̄ illi ante me adſtiterūt & maxime a ſorore ipſius uenerabili Marcellina didici uel quæ ipſe uidi uel quæ ab his agnoui qui illum in diuerſis prouīciis poſt obitum ipſius ſe uidiſſe narrarunt uel quæ ad illū ſcripta ſunt cum adhuc obiiſſe neſciretur adiutus orationibus tuis & meritis tanti uiri licet inculto ſermone breuiter ſtrictimq; deſcribam ut lectoris animū & ſi ſermo offenderit tamen breuitas ad legendum prouocet

Title page of St. Ambrose's *De Officiis et Opuscula.* Printed by Christopher Valdarfer, Milan, 1474.

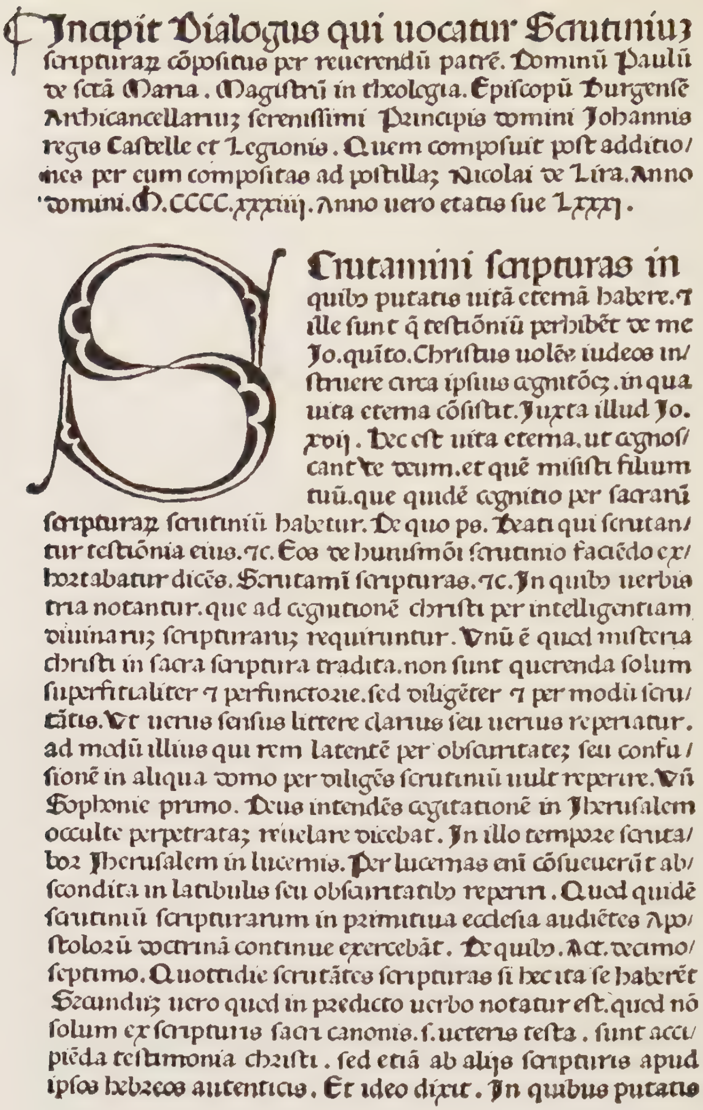
the impression that he himself did not actually do typesetting or presswork but employed others to do them.

John Numeister, a native of Mainz and, according to tradition, one of Gutenberg's workmen, started to print at Foligno in 1470. He produced the first printed edition of Dante in 1472. He later printed in Mainz, and still later in what was then the province of Languedoc and in Lyons, in France.

Antonius Zarotus printed 140 books at Milan between 1471 and 1497. Zarotus organized a joint-stock company with seven partners. Their written agreement, in which the duties of each partner were specifically set forth, is still in existence. Leonhard Pachel and Ulrich Scinzenzeler also printed in Milan from 1478 to 1487, producing about one hundred editions in partnership and many more after they separated and each set up for himself. Christopher Valdarfer issued about forty books at Venice and Milan between 1474 and 1488.

Antonio Miscomini began printing in 1476 in Venice, where he issued five books. Afterwards, in 1481, he removed to Florence, where he produced more than sixty additional books before 1495.

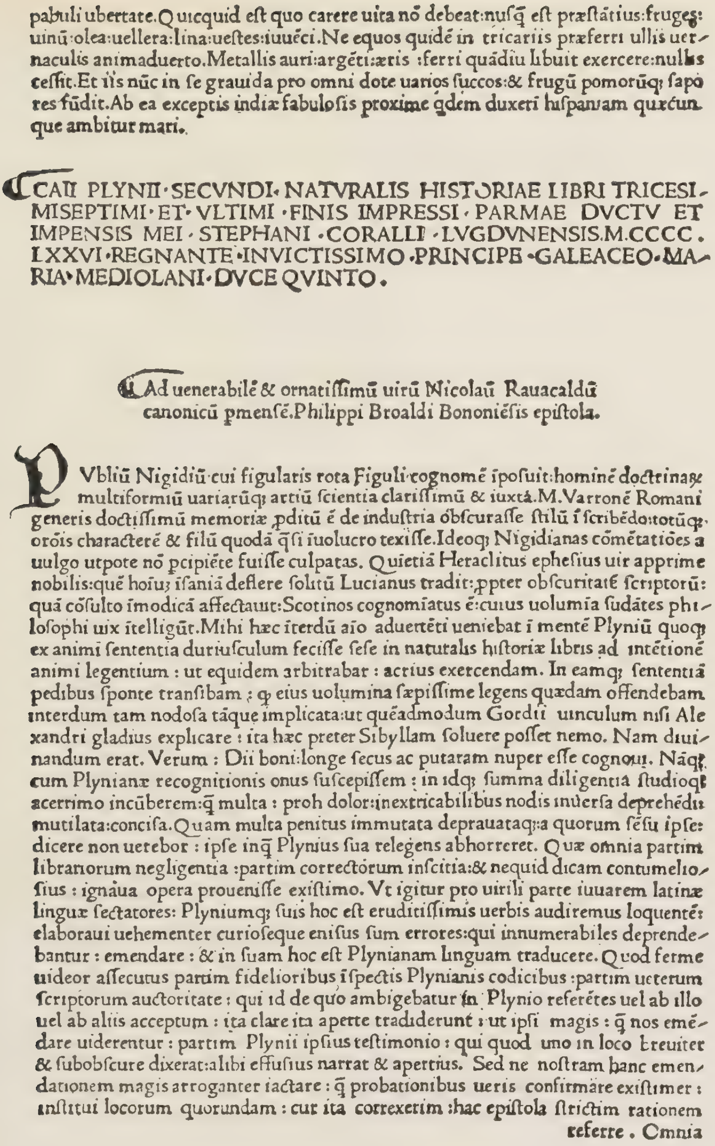
Bartolommeo di Francesco di Libri was a Florentine priest who turned to printing in 1482. He issued the first printed edition of the works of Homer and also works by Boccaccio and Savonarola. He kept his name out of most of his books, but they are traceable because of his distinctive type faces, of which he used five, three Roman, a Gothic, and a



¶ Incipit Dialogus qui uocatur Scrutiniuȝ ſcripturaꝝ cōpoſitus per reuerendū patrē. Dominū Paulū de ſctā Maria. Magiſtrū in theologia. Epiſcopū Burgenſē Archicancellariuȝ ſereniſſimi Principis domini Johannis regis Caſtelle et Legionis. Quem compoſuit poſt additiones per eum compoſitas ad poſtillaȝ Nicolai de Lira. Anno domini. M.CCCC.xxxiiij. Anno uero etatis ſue Lxxxj.

Scrutamini ſcripturas in quibꝫ putatis uitā eternā habere. ⁊ ille ſunt q̄ teſtimōniū perhibēt de me Jo. quīto. Chriſtus uolēs iudeos inſtruere circa ipſius cognitōeꝫ. in qua uita eterna cōſiſtit. Juxta illud Jo. xvij. Hec eſt uita eterna. ut cognoſcant te deum. et quē miſiſti filium tuū. que quidē cognitio per ſacrarū ſcripturaꝝ ſcrutiniū habetur. De quo ps. Beati qui ſcrutantur teſtimōnia eius. ⁊c. Eos de huiuſmōi ſcrutinio faciēdo exhortabatur dicēs. Scrutamī ſcripturas. ⁊c. In quibꝫ uerbis tria notantur. que ad cognitionē chriſti per intelligentiam diuinaruȝ ſcripturaruȝ requiruntur. Vnū ē quod miſteria chriſti in ſacra ſcriptura tradita. non ſunt querenda ſolum ſuperfitialiter ⁊ perfunctorie. ſed diligēter ⁊ per modū ſcrutātis. Vt uerius ſenſus littere clarius ſeu uerius reperiatur. ad modū illius qui rem latentē per obſcuritateȝ ſeu confuſionē in aliqua domo per diligēs ſcrutiniū uult reperire. Vñ Sophonie primo. Deus intendēs cogitationē in Jheruſalem occulte perpetrataȝ reuelare dicebat. In illo tempore ſcrutabor Jheruſalem in lucernis. Per lucernas enī cōſueuerūt abſcondita in latibulis ſeu obſcuritatibꝫ reperiri. Quod quidē ſcrutiniū ſcripturarum in primitiua eccleſia audiētes Apoſtolorū doctrinā continue exercebāt. De quibꝫ. Act. decimoſeptimo. Quottidie ſcrutātes ſcripturas ſi hec ita ſe haberēt. Secunduȝ uero quod in predicto uerbo notatur eſt. quod nō ſolum ex ſcripturis ſacri canonis. ſ. ueteris teſta. ſunt accipiēda teſtimonia chriſti. ſed etiā ab alijs ſcripturis apud ipſos hebreos autenticis. Et ideo dixit. In quibus putatis

First page of Paulus de Sancta Maria's *Dialogus qui Vocatur Scrutinium Scripturarum.* Printed by John Schall, Mantua, 1475.



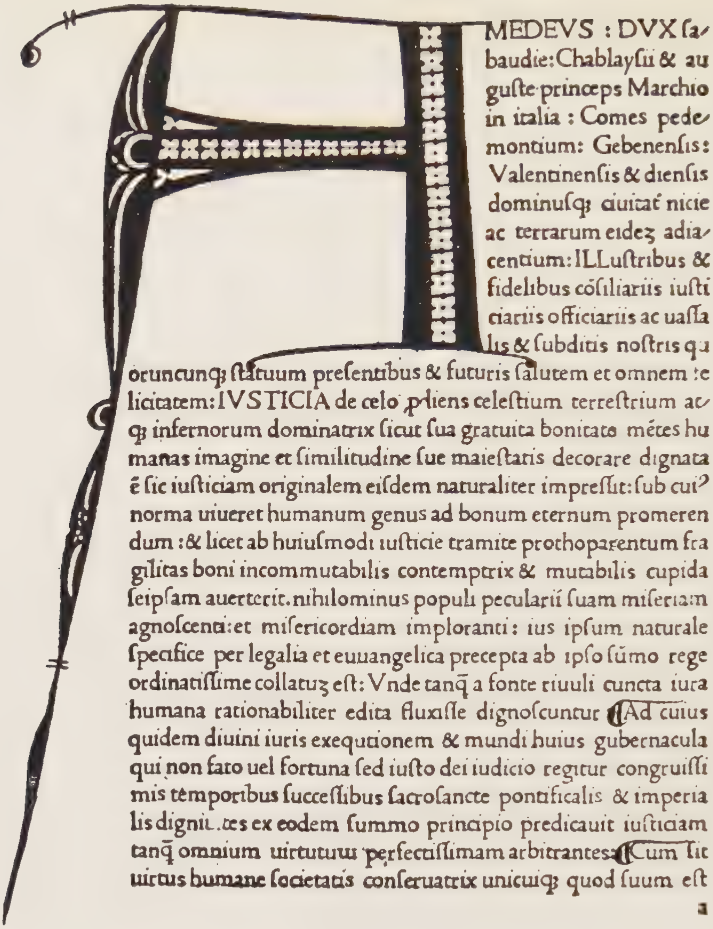
pabuli ubertate.Quicquid eſt quo carere uita nō debeat:nuſq̄ eſt præſtātius:fruges: uinū:olea:uellera:lina:ueſtes:iuuēci.Ne equos quidē in tricariis præferri ullis uernaculis animaduerto.Metallis auri:argēti:æris :ferri quādiu libuit exercere:nullis ceſſit.Et iis nūc in ſe grauida pro omni dote uarios ſuccos:& frugū pomorūq; ſapores fūdit.Ab ea exceptis indiæ fabuloſis proxime q̄dem duxeri hiſpaniam quæcunque ambitur mari.

¶ CAII PLYNII·SECVNDI· NATVRALIS HISTORIAE LIBRI TRICESIMISEPTIMI·ET·VLTIMI ·FINIS IMPRESSI·PARMAE DVCTV ET IMPENSIS MEI·STEPHANI ·CORALLI ·LVGDVNENSIS.M.CCCC.LXXVI·REGNANTE·INVICTISSIMO·PRINCIPE·GALEACEO·MARIA·MEDIOLANI·DVCE QVINTO.

¶ Ad uenerabilē & ornatiſſimū uirū Nicolaū Rauacaldū canonicū ꝑmenſē.Philippi Broaldi Bononiēſis epiſtola.

PVbliū Nigidiū cui figularis rota Figuli cognomē īpoſuit:hominē doctrinaꝝ multiformiū uariarūq; artiū ſcientia clariſſimū & iuxtā.M.Varronē Romani generis doctiſſimū memoriæ ꝓditū ē de induſtria obſcuraſſe ſtilū ī ſcribēdo:totūq; orōis characterē & filū quodā q̄ſi īuolucro texiſſe.Ideoq; Nigidianas cōmētatiōes a uulgo utpote nō ꝑcipiēte fuiſſe culpatas. Quietiā Heraclitus epheſius uir apprime nobilis:quē hoīu; īſaniā deflere ſolitū Lucianus tradit:ꝓpter obſcuritatē ſcriptorū: quā cōſulto īmodicā affectauit:Scotinos cognomīatus ē:cuius uolumīa ſudātes philoſophi uix ītelligūt.Mihi hæc īterdū aīo aduertēti ueniebat ī mentē Plyniū quoq; ex animi ſententia duriuſculum feciſſe ſeſe in naturalis hiſtoriæ libris ad intētionē animi legentium : ut equidem arbitrabar : acrius exercendam. In eamq; ſententiā pedibus ſponte tranſibam : ꝗ eius uolumina ſæpiſſime legens quædam offendebam interdum tam nodoſa tāque implicata:ut quēadmodum Gordii uinculum niſi Alexandri gladius explicare : ita hæc preter Sibyllam ſoluere poſſet nemo. Nam diuinandum erat. Verum : Dii boni:longe ſecus ac putaram nuper eſſe cognoui. Nāq; cum Plynianæ recognitionis onus ſuſcepiſſem : in idq; ſumma diligentia ſtudioq; acerrimo incūberem:q̄ multa : proh dolor:inextricabilibus nodis inuerſa deprehēdi: mutilata:conciſa.Quam multa penitus immutata deprauataq;:a quorum ſēſu ipſe: dicere non uerebor : ipſe inq̄ Plynius ſua relegens abhorreret. Quæ omnia partim librariorum negligentia :partim correctorum inſcitia:& nequid dicam contumelioſius : ignaua opera proueniſſe exiſtimo. Vt igitur pro uirili parte iuuarem latinæ linguæ ſectatores: Plyniumq; ſuis hoc eſt eruditiſſimis uerbis audiremus loquentē: elaboraui uehementer curioſeque eniſus ſum errores:qui innumerabiles deprendebantur : emendare : & in ſuam hoc eſt Plynianam linguam traducere. Quod ferme uideor aſſecutus partim fidelioribus īſpectis Plynianis codicibus :partim ueterum ſcriptorum auctoritate : qui id de quo ambigebatur in Plynio referētes uel ab illo uel ab aliis acceptum : ita clare ita aperte tradiderunt : ut ipſi magis : q̄ nos emēdare uiderentur : partim Plynii ipſius teſtimonio : qui quod uno in loco breuiter & ſubobſcure dixerat:alibi effuſius narrat & apertius. Sed ne noſtram hanc emendationem magis arroganter iactare : q̄ probationibus ueris confirmare exiſtimer : inſtitui locorum quorundam : cur ita correxerim :hac epiſtola ſtrictim rationem referre . Omnia

Page of Pliny's *Natural History*. Printed by Stephen Corallus, Parma, 1476.



AMEDEVS : DVX ſabaudie: Chablayſii & auguſte princeps Marchio in italia : Comes pedemontium: Gebenenſis: Valentinenſis & dienſis dominuſqꝫ ciuitat̃ nicie ac terrarum eideꝫ adiacentium: ILLuſtribus & fidelibus cõſiliariis iuſticiariis officiariis ac uaſſalis & ſubditis noſtris quoruncunqꝫ ſtatuum preſentibus & futuris ſalutem et omnem felicitatem: IVSTICIA de celo ꝓliens celeſtium terreſtrium acqꝫ infernorum dominatrix ſicut ſua gratuita bonitate mẽtes humanas imagine et ſimilitudine ſue maieſtatis decorare dignata ẽ ſic iuſticiam originalem eiſdem naturaliter impreſſit: ſub cuiꝰ norma uiueret humanum genus ad bonum eternum promerendum : & licet ab huiuſmodi iuſticie tramite prothoparentum fragilitas boni incommutabilis contemptrix & mutabilis cupida ſeipſam auerterit. nihilominus populi peculariı́ ſuam miſeriam agnoſcenti: et miſericordiam imploranti : ius ipſum naturale ſpecifice per legalia et euuangelica precepta ab ipſo ſũmo rege ordinatiſſime collatuꝫ eſt: Vnde tanq̃ a fonte riuuli cuncta iura humana rationabiliter edita fluxiſſe dignoſcuntur ¶Ad cuius quidem diuini iuris exequtionem & mundi huius gubernacula qui non fato uel fortuna ſed iuſto dei iudicio regitur congruiſſimis temporibus ſucceſſibus ſacroſancte pontificalis & imperialis dignitates ex eodem ſummo principio predicauit iuſticiam tanq̃ omnium uirtutum perfectiſſimam arbitrantes: ¶Cum ſit uirtus humane ſocietatis conſeruatrix unicuiqꝫ quod ſuum eſt

a

First page of *Decreta Sabaudier Ducalia*. Printed by John Fabri, Turin, 1477.

Greek. Considerably more than one hundred editions have been ascribed to his eighteen years of activity.

Antonius Francisci began printing at Florence in 1487. To his *Letters of Diogenes* Pollard awards the unenviable distinction of being the worst printed book of the fifteenth century. Lorenzo Morgiani and John Petri, who began at Florence in 1491, issued about eighty books.

Gerard de Lisa printed at Treviso, Venice, Cividale, and Udino between 1471 and 1492. This wandering printer is credited with more than thirty editions, produced at various times at the different places named.

John Rubeus printed at Treviso from 1480 to 1485. He produced but eight books in Treviso, and is best known for his work in Venice, where between 1486 and 1499 he brought forth more than forty books.

Ugo Rugerius issued 60 books at Bologna between 1474 and 1499. Rugerius also printed six books in Pisa in 1494. After 1500 he removed to Reggio, his native city, where he continued to print.

Franciscus de Benedictis, who printed at Bologna from 1487 to 1498, is credited with more than sixty books. Franciscus was nicknamed "Plato," by which name he referred to himself in his colophons.

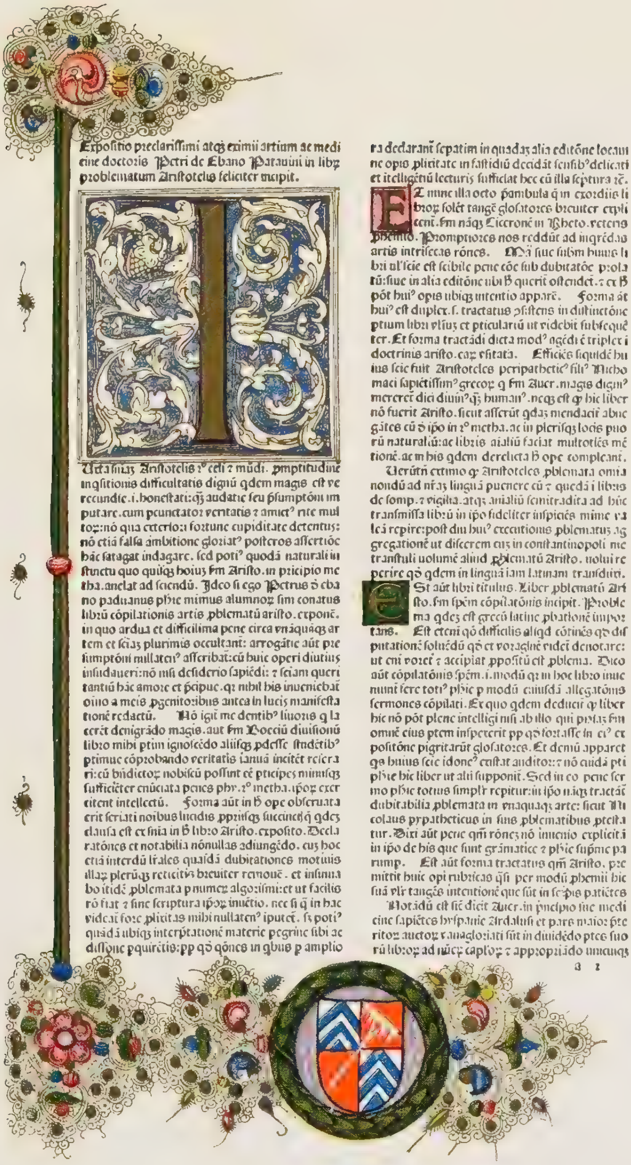
We might continue to Naples, Verona, Brescia, Parma, and other centers of early Italian printing, but the major events outlined in this and the following chapters suffice to show the rapid spread of the art and its remarkable development south of the Alps.

CHAPTER IX

THE EARLY PRINTERS OF VENICE

VENICE, "City of the Lagoons," attracted the new art of printing as it attracted everything of culture and refinement. The Venetian Contarini speaks of "the wonderful situation of the city, which possesses so many advantages that one might think the site had been selected not by men, but by the gods themselves" (Putnam). Its efficient naval force kept enemies at a distance, its sailing vessels traded in all the known parts of the world, its nobles were wealthy, its Government protected and patronized learning and the arts, and it was a recognized market for the buying and selling of manuscripts. The manufacture of paper was an established industry, the demand for it being so great that the Venetian Senate forbade the exportation from the dominions of the Republic of the rags from which it was made.

The inevitable result of these favoring conditions was that Venice should take first place among the Italian cities as a printing center. Scholderer says that between 1481 and 1500 exactly 100 new printing offices were set up in Venice, and from Brown we learn that the total number of fifteenth-century printers was 268, many more than the total number in the four Italian cities ranking next: Milan, 63; Rome, 41;



Expoſitio preclariſſimi atq3 eximii artium ac medi
cine doctoris Petri de Ebano Patauini in libꝛ
problematum Ariſtotelis feliciter incipit.

Uxta ſniaʒ Ariſtotelis 2° celi ⁊ mūdi. ꝓmptitudine
inqſitionis difficultatis dignū qdem magis eſt ve
recundie.i.honeſtati:q̄3 audatie ſeu ꝑſumptōni im
putare.cum ꝑcunctatoꝛ veritatis ⁊ amic⁹ rite mul
toꝝ:nō qua exterioꝛi fortune cupiditate detentus:
nō etiā falſa ambitione gloriat⁹ poſteros aſſertiōe
hāc ſatagat indagare. ſed poti⁹ quodā naturali in
ſtinctu quo quilꝫ hoīuʒ ſm Ariſto.in pricipio me
tha.anelat ad ſciendū. Jdeo ſi ego Petrus ꝺ eba
no paduanus phie minimus alumnoꝝ ſim conatus
librū cōpilationis artis ꝓblematū ariſto. exponē.
in quo ardua et difficilima pene circa vnāquāq3 ar
tem et ſciaʒ plurimis occultant: arrogātie aūt pre
ſumptōni nullaten⁹ aſſcribat:cū huic operi diutius
inſudaueri:nō niſi deſiderio ſapiēdi: ⁊ ſciam queri
tantiū hāc amoꝛe et ꝑcipue.qꝛ nihil his inueniebāt
oīno a meis ꝓgenitoꝛibus antea in lucis manifeſta
tionē redactū. Nō igit̄ me dentib⁹ liuoꝛis q la
cerēt denigrādo magis.aut ſm Boeciū diuiſionū
libro mihi ptim ignoſcēdo aliiſq3 ꝓdeſſe ſtudētib⁹
ptimue cōꝓbando veritatis ianuā incitēt reſera
ri:cū bñdictoꝝ nobiſcū poſſint eē pticipes mīmiſq3
ſufficiēter enūciata penes phr.2° metha.ipoꝝ exer
citent intellectū. Forma aūt in h̄ ope obſeruata
erit ſeriatī noībus lucidis ꝓpriiſq3 ſuccinctiq̄ qdeʒ
clauſa eſt ex ſnia in h̄ libꝛo Ariſto.expoſito.Decla
ratōnes et notabilia nōnullas adiungēdo. cuʒ hoc
etiā interdū lr̄ales quaſdā dubitationes motiuis
illaꝝ plerūq3 reticitis breuiter remouē. et inſinua
bo itidē ꝓblemata p numeꝝ algoꝛiſmi:et ut facilio
rō fiat ⁊ ſine ſcriptura ipoꝝ inuētio. nec ſi q̄ in hac
videat̄ foꝛe ꝓlixitas mihi nullaten⁹ iputet̄. ſʒ poti⁹
quādā ubiq3 interꝑtatiōnē materie ꝑgrine ſibi ac
diſſōne ꝓquirētis:pp qꝺ qōnes in qbus p amplio
ra declarant̄ ſeꝑatim in quadaʒ alia editōne locaui
ne opis ꝓlixitate in faſtidiū decidāt ſenſib⁹ delicati
et itelligētiū lecturis ſufficiat hec cū illa ſcptura ⁊c.

ET nunc illa octo ꝑambula q̄ in exoꝛdiis li
broꝝ ſolēt tangē gloſatoꝛes breuiter expli
cent.ſm nāq3 Ciceronē in Rheto.veteris
ꝓhemio. Promptioꝛes nos reddūt ad ingrēdā
artis intrīſecas rōnes. Mā ſiue ſubm huius li
bri ul'ſcie eſt ſcibile pene cōe ſub dubitatōe ꝓla
tū:ſiue in alia editōne ubi h̄ querit oſtendet.⁊ ex h̄
pōt hui⁹ opis ubiq3 intentio apparē. Forma āt
hui⁹ eſt duplex.ſ. tractatus ꝯſiſtens in diſtinctōne
ptium libri vliuʒ et pticulariū ut videbit ſubſequē
ter.Et forma tractādi dicta mod⁹ agēdi ē triplex i
doctrinis ariſto.caꝝ vſitata. Efficiēs ſiquidē hu
ius ſcie fuit Ariſtoteles peripathetic⁹ fili⁹ Nicho
maci ſapiētiſſim⁹ grecoꝝ q ſm Auer.magis dign⁹
mereret̄ dici diuin⁹ q̄3 human⁹.neq3 eſt ꝙ hic liber
nō fuerit Ariſto.ſicut aſſerūt qdaʒ mendacii abne
gātes cū ꝺ ipo in 2° metha.ac in pleriſq3 locis puo
rū naturaliū:ac libris aīaliū faciat multotiēs mē
tionē.ac in his qdem derelicta h̄ ope compleant.

Uerūtā exiſtimo ꝙ Ariſtoteles ꝓblemata omīa
nondū ad nr̄aʒ linguā puenere cū ⁊ quedā i libꝛis
de ſomp.⁊ vigilia.atq3 aīaliū ſemitradita ad hūc
tranſmiſſa librū in ipo fideliter inſpiciēs minime va
leā repire:poſt diu hui⁹ exequtionis ꝓblematuʒ ag
gregationē ut diſcerem cuʒ in conſtantinopoli me
tranſtuli uolumē aliud ꝓblematū Ariſto. uolui re
perire qꝺ qdem in linguā iam latinam tranſduxi.

ESt aūt libri titulus.Liber ꝓblematū Ari
ſto.ſm ſpēm cōpilatōnis incipit. Proble
ma qdeʒ eſt grecū latine ꝓbatione impoꝛ
tans. Eſt etenī qꝺ difficilis aliqd cōtinēs qꝺ diſ
putatiōnē ſoluēdū qꝺ et voraginē videt̄ denotare:
ut eni vocet ⁊ accipiat ꝓpoſitū eſt ꝓblema. Dico
aūt cōpilatōnis ſpēm.i.modū qꝛ in hoc libꝛo inue
niūt fere toti⁹ phie p modū cuiuſdā allegatōnis
ſermones cōpilati.Ex quo qdem deducit̄ ꝙ liber
hic nō pōt plene intelligi niſi ab illo qui ꝑtaʒ ſm
omnē eius ptem inſpexerit pp qꝺ foꝛtaſſe in ei⁹ ex
poſitōne pigritarūt gloſatoꝛes.Et demū apparet
qs huius ſcie idone⁹ exiſtat auditoꝛ:⁊ nō cuidā pti
phie hic liber ut alii ſupponit.Sed in eo pene ſer
mo phie totius ſimplr̄ repitur:in ipo nāq3 tractāt̄
dubitabilia ꝓblemata in vnaquaq3 arte: ſicut Ni
colaus pipatheticus in ſuis ꝓblematibus ꝓteſta
tur.Dixi aūt pene qm̄ rōneʒ nō inuenio explicitā
in ipo de his que ſunt grāmatice ⁊ phie ſupōne pa
rump. Eſt aūt forma tractatus qm̄ Ariſto. pre
mittit huic opi rubricas q̄ſi per modū ꝓhemii hic
ſuā vlr̄ tangēs intentionē que ſūt in ſcptis paciētes

Notādū eſt ſic dicit Auer.in ꝑncipio ſue medi
cine ſapiētes hiſpanie Andaluſi et pars maioꝛ pte
ritoꝝ auctoꝝ ⁊ inagloꝛiati ſūt in diuidēdo ptes ſuo
rū libꝛoꝝ ad uīcē caploꝝ ⁊ appꝛopriādo unicuiq3

a 1

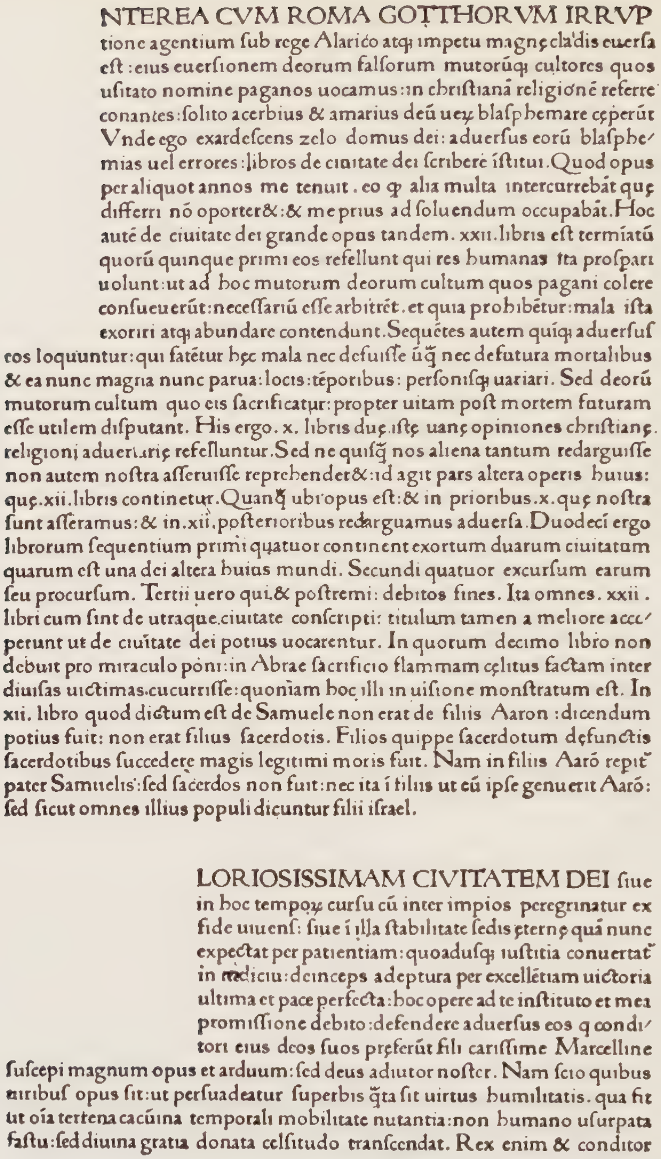
Illuminated first page of Peter Abano's *Problems of Aristotle.* Printed by John Herbort, Venice, 1483. (Reduced.)

Florence, 37; and Naples, 27. Bernard estimates the number of books printed in Venice before 1500 as two million volumes. Quantity, however, was not the only standard of superiority. Venice ranked highest in the elegance of its printed productions and in the worthy character of the literature they made accessible.

John of Speyer (a city on the Rhine about midway between Mainz and Strasbourg), of whom little is known beyond the fact that he was a German who went to Venice with his wife and family, was the first to print in Venice. His brief career there began in 1469 and ended with his death in 1470. In that period he produced complete editions of three important books and a part of a fourth. The first was Cicero's *Epistles*, of which he printed two editions totaling 700 copies. The other books were Pliny's *Natural History*, Livy's *History of Rome*, and St. Augustine's *The City of God*, the last named being begun by John and finished after his death by his brother.

John of Speyer printed beautiful books, using a legible and comely Roman type face of a design corresponding in "color" somewhat to that which in modern times is known as Old Style Antique. So satisfactory was his work that the Collegio of Venice granted him a monopoly of printing in that city for five years beginning September 18, 1469, a privilege, however, he did not live to enjoy.

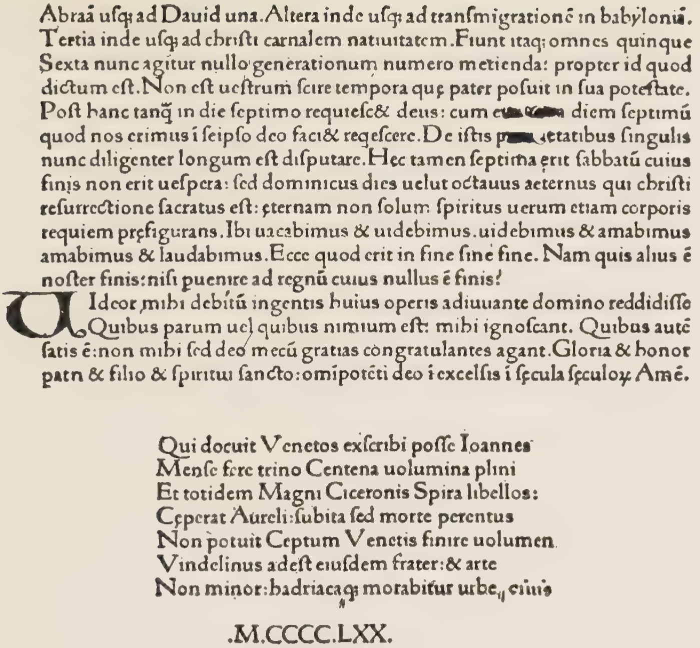
John's brother Wendelin succeeded to the business and continued to print until his own death in 1478.



NTEREA CVM ROMA GOTTHORVM IRRVPtione agentium ſub rege Alarico atq; impetu magnę cladis euerſa eſt: eius euerſionem deorum falſorum mutorúq; cultores quos uſitato nomine paganos uocamus: in chriſtianā religionē referre conantes: ſolito acerbius & amarius deū ueꝝ blaſphemare cęperūt. Vnde ego exardeſcens zelo domus dei: aduerſus eorū blaſphemias uel errores: libros de ciuitate dei ſcribere īſtitui. Quod opus per aliquot annos me tenuit. eo ꝙ alia multa intercurrebāt quę differri nō oporter&: & me prius ad ſoluendum occupabāt. Hoc autē de ciuitate dei grande opus tandem. xxii. libris eſt termīatū quorū quinque primi eos refellunt qui res humanas ita proſperari uolunt: ut ad hoc mutorum deorum cultum quos pagani colere conſueuerūt: neceſſariū eſſe arbitrēt. et quia prohibētur: mala iſta exoriri atq; abundare contendunt. Sequētes autem quīq; aduerſuſ eos loquuntur: qui fatētur hęc mala nec defuiſſe ūꝗ nec defutura mortalibus & ea nunc magna nunc parua: locis: tēporibus: perſoniſq; uariari. Sed deorū mutorum cultum quo eis ſacrificatur: propter uitam poſt mortem futuram eſſe utilem diſputant. His ergo. x. libris duę iſtę uanę opiniones chriſtianę. religioni aduerſarię refelluntur. Sed ne quiſꝗ nos aliena tantum redarguiſſe non autem noſtra aſſeruiſſe reprehender&: id agit pars altera operis huius: quę. xii. libris continetur. Quanꝗ ubi opus eſt: & in prioribus. x. quę noſtra ſunt aſſeramus: & in. xii. poſterioribus redarguamus aduerſa. Duodecī ergo librorum ſequentium primi quatuor continent exortum duarum ciuitatum quarum eſt una dei altera huius mundi. Secundi quatuor excurſum earum ſeu procurſum. Tertii uero qui & poſtremi: debitos fines. Ita omnes. xxii. libri cum ſint de utraque ciuitate conſcripti: titulum tamen a meliore acceperunt ut de ciuitate dei potius uocarentur. In quorum decimo libro non debuit pro miraculo poni: in Abrae ſacrificio flammam cęlitus factam inter diuiſas uictimas cucurriſſe: quoniam hoc illi in uiſione monſtratum eſt. In xii. libro quod dictum eſt de Samuele non erat de filiis Aaron: dicendum potius fuit: non erat filius ſacerdotis. Filios quippe ſacerdotum defunctis ſacerdotibus ſuccedere magis legitimi moris fuit. Nam in filiis Aarō repit̃ pater Samuelis: ſed ſacerdos non fuit: nec ita ī filiis ut eū ipſe genuerit Aarō: ſed ſicut omnes illius populi dicuntur filii iſrael.

LORIOSISSIMAM CIVITATEM DEI ſiue in hoc tempoꝝ curſu cū inter impios peregrinatur ex fide uiuenſ: ſiue ī illa ſtabilitate ſedis ęternę quā nunc expectat per patientiam: quoadusq; iuſtitia conuertat̃ in iudiciu: deinceps adeptura per excellētiam uictoria ultima et pace perfecta: hoc opere ad te inſtituto et mea promiſſione debito: defendere aduerſus eos q conditori eius deos ſuos pręferūt fili cariſſime Marcelline ſuſcepi magnum opus et arduum: ſed deus adiutor noſter. Nam ſcio quibus uiribuſ opus ſit: ut perſuadeatur ſuperbis ꝗta ſit uirtus humilitatis. qua fit ut oīa terrena cacūina temporali mobilitate nutantia: non humano uſurpata faſtu: ſed diuina gratia donata celſitudo tranſcendat. Rex enim & conditor

First page of St. Augustine's *The City of God.* Printed by John and Wendelin Speyer, Venice, 1470.



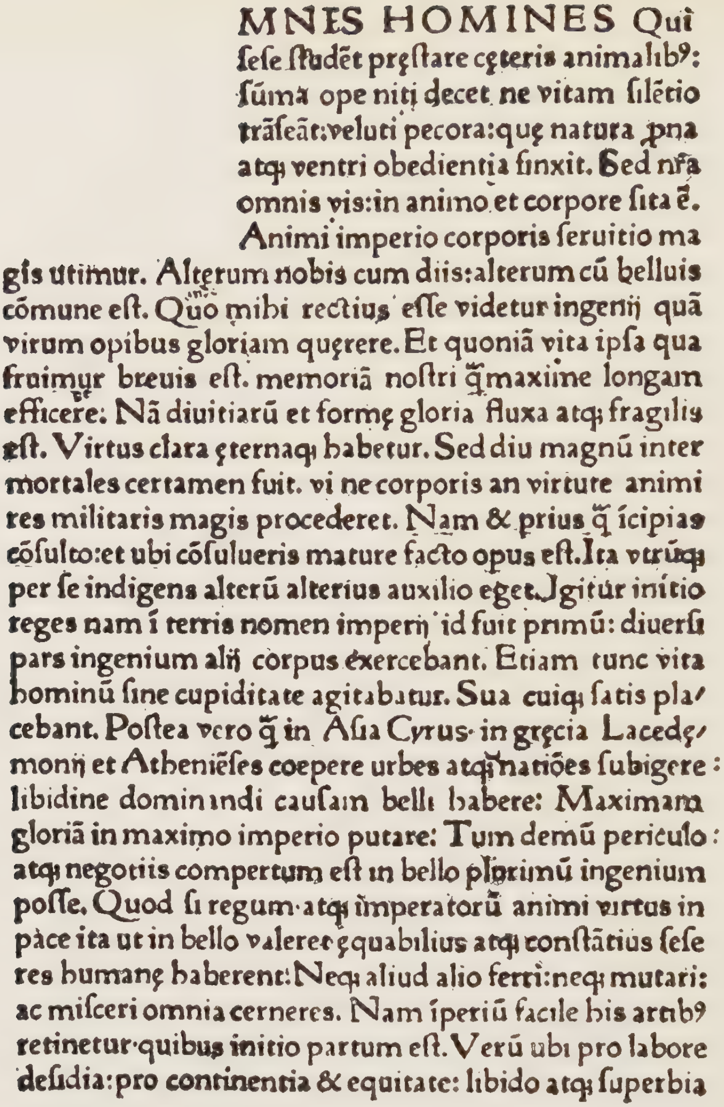
Abraã uſq; ad Dauid una. Altera inde uſq; ad tranſmigrationē in babyloniã. Tertia inde uſq; ad chriſti carnalem natiuitatem. Fiunt itaq; omnes quinque Sexta nunc agitur nullo generationum numero metienda: propter id quod dictum eſt. Non eſt ueſtrum ſcire tempora quę pater poſuit in ſua poteſtate. Poſt hanc tanq̃ in die ſeptimo requieſc& deus: cum e[illegible] diem ſeptimū quod nos erimus ī ſeipſo deo faci& reqeſcere. De iſtis p[illegible] etatibus ſingulis nunc diligenter longum eſt diſputare. Hec tamen ſeptima ęrit ſabbatū cuius finis non erit ueſpera: ſed dominicus dies uelut octauus aeternus qui chriſti reſurrectione ſacratus eſt: ęternam non ſolum ſpiritus uerum etiam corporis requiem pręfigurans. Ibi uacabimus & uidebimus. uidebimus & amabimus amabimus & laudabimus. Ecce quod erit in fine ſine fine. Nam quis alius ē noſter finis: niſi puenire ad regnū cuius nullus ē finis?

VIdeor mihi debitū ingentis huius operis adiuuante domino reddidiſſe Quibus parum uel quibus nimium eſt: mihi ignoſcant. Quibus autē ſatis ē: non mihi ſed deo mecū gratias congratulantes agant. Gloria & honor patri & filio & ſpiritui ſancto: omipotēti deo ī excelſis ī ſęcula ſęculoꝝ Amē.

Qui docuit Venetos exſcribi poſſe Ioannes
Menſe fere trino Centena uolumina plini
Et totidem Magni Ciceronis Spira libellos:
Cęperat Aureli: ſubita ſed morte perentus
Non potuit Ceptum Venetis finire uolumen.
Vindelinus adeſt eiuſdem frater: & arte
Non minor: badriacaq; morabitur urbe ciuis

.M.CCCC.LXX.

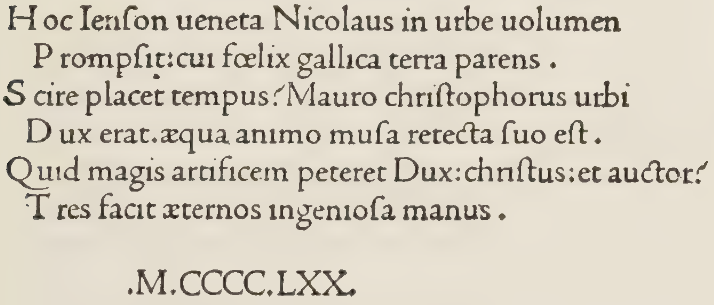
Last page, containing colophon, of the Speyer edition of St. Augustine's *The City of God.*



MNES HOMINES Qui ſeſe ſtudēt prȩſtare cȩteris animalib⁹: ſūma ope niti decet ne vitam ſilētio trāſeāt: veluti pecora: quȩ natura ꝓna atq; ventri obedientia finxit. Sed nr̄a omnis vis: in animo et corpore ſita ē. Animi imperio corporis ſeruitio magis utimur. Alterum nobis cum diis: alterum cū belluis cōmune eſt. Quo mihi rectius eſſe videtur ingenii quā virum opibus gloriam quȩrere. Et quoniā vita ipſa qua fruimur breuis eſt. memoriā noſtri q̄maxime longam efficere: Nā diuitiarū et formȩ gloria fluxa atq; fragilis eſt. Virtus clara ȩternaq; habetur. Sed diu magnū inter mortales certamen fuit. vi ne corporis an virtute animi res militaris magis procederet. Nam & prius q̄ īcipias cōſulto: et ubi cōſulueris mature facto opus eſt. Ita vtrūq; per ſe indigens alterū alterius auxilio eget. Igitur initio reges nam ī terris nomen imperii id fuit primū: diuerſi pars ingenium alii corpus exercebant. Etiam tunc vita hominū ſine cupiditate agitabatur. Sua cuiq; ſatis placebant. Poſtea vero q̄ in Aſia Cyrus in grȩcia Lacedȩmonii et Athenieſes coepere urbes atq; natiōes ſubigere: libidine dominandi cauſam belli habere: Maximam gloriā in maximo imperio putare: Tum demū periculo: atq; negotiis compertum eſt in bello plurimū ingenium poſſe. Quod ſi regum atq; imperatorū animi virtus in pace ita ut in bello valeret ȩquabilius atq; conſtātius ſeſe res humanȩ haberent: Neq; aliud alio ferri: neq; mutari: ac miſceri omnia cerneres. Nam īperiū facile his artib⁹ retinetur quibus initio partum eſt. Verū ubi pro labore deſidia: pro continentia & equitate: libido atq; ſuperbia

First page of an edition of Sallust printed by John of Cologne and John Manthen, Venice, 1474.

During this eight-year period Wendelin operated a part of the time in Germany. In Venice he had as partners, at various times, John of Cologne and John Manthen. He is credited with having been the first printer to use a direction word at the bottom of a page. Two learned men, Bernard and George Alexandrinus, served the Speyer brothers as press correctors. An interesting fact in connection with John of Speyer is that he married a widow, who after his death married successively two other printers, John of Cologne and Reynaldus of Nymegen.

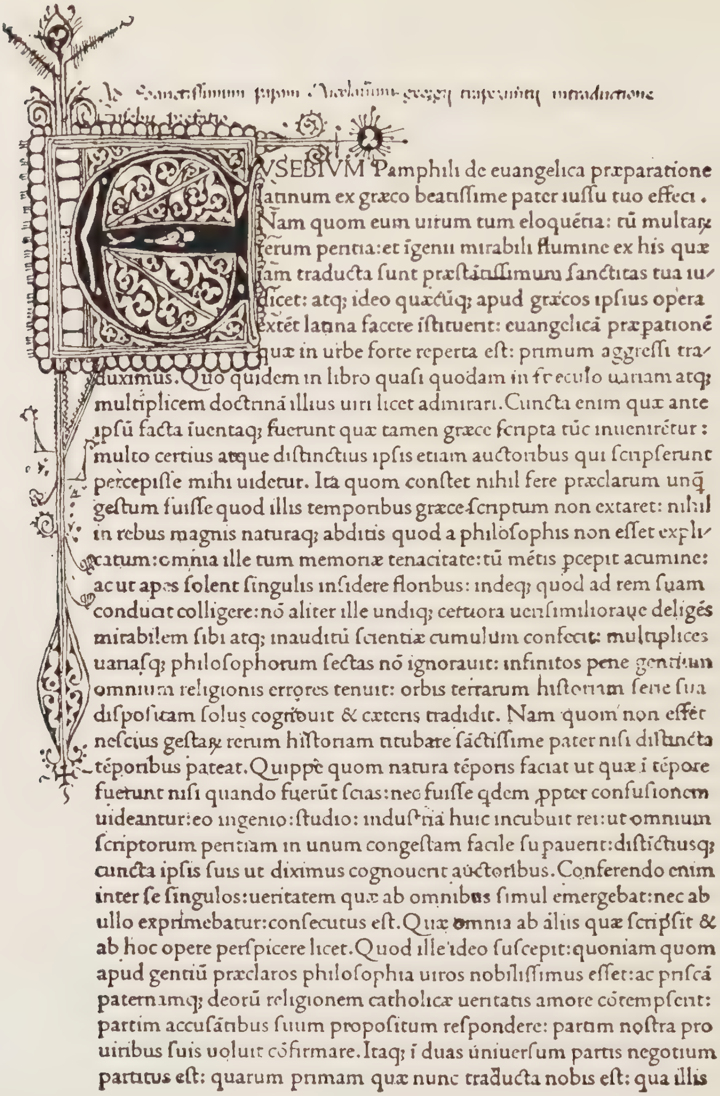


Hoc Ienſon ueneta Nicolaus in urbe uolumen
Prompſit: cui fœlix gallica terra parens.
Scire placet tempus? Mauro chriſtophorus urbi
Dux erat. æqua animo muſa retecta ſuo eſt.
Quid magis artificem peteret Dux: chriſtus: et auctor?
Tres facit æternos ingenioſa manus.

.M.CCCC.LXX.

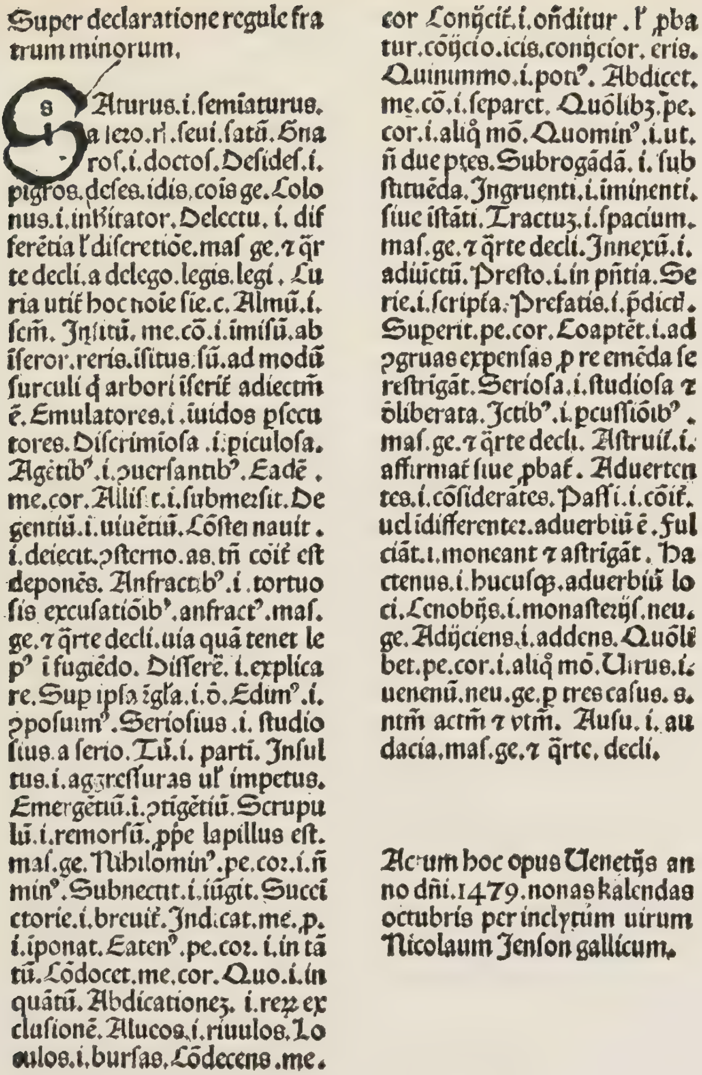
A Jenson colophon of 1470.

Nicolaus Jenson, a most illustrious early printer in Venice, was a Frenchman and evidently proud of the fact, for he usually recorded it in the colophons of his books. He served an apprenticeship in the royal mint at Paris and afterward became master of the mint at Tours. He went to Mainz to learn the new art of printing from movable types at the command of King Charles VII of France, with the intention of returning to Paris to set up an establishment there,



EVSEBIVM Pamphili de euangelica præparatione latinum ex græco beatiſſime pater iuſſu tuo effeci. Nam quom eum uirum tum eloquẽtia: tũ multarũ rerum peritia: et ĩgenii mirabili flumine ex his quæ iam traducta ſunt præſtãtiſſimum ſanctitas tua iudicet: atq; ideo quæcũq; apud græcos ipſius opera extẽt latina facere ĩſtituerit: euangelicã præparationẽ quæ in urbe forte reperta eſt: primum aggreſſi traduximus. Quo quidem in libro quaſi quodam in ſpeculo uariam atq; multiplicem doctrinã illius uiri licet admirari. Cuncta enim quæ ante ipſũ facta ĩuentaq; fuerunt quæ tamen græce ſcripta tũc inuenirẽtur: multo certius atque diſtinctius ipſis etiam auctoribus qui ſcripſerunt percepiſſe mihi uidetur. Ita quom conſtet nihil fere præclarum unq̃ geſtum fuiſſe quod illis temporibus græce ſcriptum non extaret: nihil in rebus magnis naturaq; abditis quod a philoſophis non eſſet explicatum: omnia ille tum memoriæ tenacitate: tũ mẽtis ꝑcepit acumine: ac ut apes ſolent ſingulis inſidere floribus: indeq; quod ad rem ſuam conducit colligere: nõ aliter ille undiq; certiora ueriſimilioraq; deligẽs mirabilem ſibi atq; inauditũ ſcientiæ cumulum confecit: multiplices uariaſq; philoſophorum ſectas nõ ignorauit: infinitos pene gentium omnium religionis errores tenuit: orbis terrarum hiſtoriam ſerie ſua diſpoſitam ſolus cognouit & cæteris tradidit. Nam quom non eſſet neſcius geſtarũ rerum hiſtoriam titubare ſãctiſſime pater niſi diſtincta tẽporibus pateat. Quippe quom natura tẽporis faciat ut quæ ĩ tẽpore fuerunt niſi quando fuerũt ſcias: nec fuiſſe q̃dem ꝓpter confuſionem uideantur: eo ingenio: ſtudio: induſtria huic incubuit rei: ut omnium ſcriptorum peritiam in unum congeſtam facile ſuꝑauerit: diſtinctiusq; cuncta ipſis ſuis ut diximus cognouerit auctoribus. Conferendo enim inter ſe ſingulos: ueritatem quæ ab omnibus ſimul emergebat: nec ab ullo exprimebatur: conſecutus eſt. Quæ omnia ab aliis quæ ſcripſit & ab hoc opere perſpicere licet. Quod ille ideo ſuſcepit: quoniam quom apud gentiũ præclaros philoſophia uiros nobiliſſimus eſſet: ac priſcã paternamq; deorũ religionem catholicæ ueritatis amore cõtempſerit: partim accuſãtibus ſuum propoſitum reſpondere: partim noſtra pro uiribus ſuis uoluit cõfirmare. Itaq; ĩ duas uniuerſum partis negotium partitus eſt: quarum primam quæ nunc traducta nobis eſt: qua illis

First page of Eusebius' *De Evangelica Praeparatione.* Printed by Nicolaus Jenson, Venice, 1470. Because of the clearness of impression it has been claimed that this was the first book printed by Jenson.

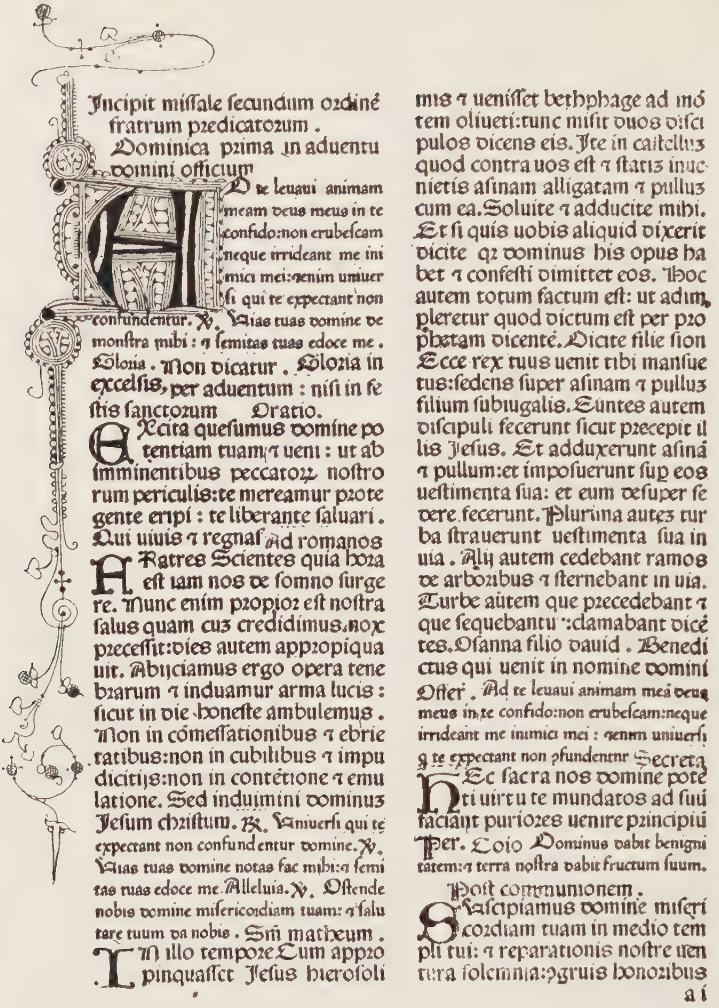


Super declaratione regule fratrum minorum.

SAturus.i.ſemiaturus. a ſero.ri.ſeui.ſatū. Gnaroſ.i.doctoſ. Deſideſ.i. pigros.deſes.idis.cois ge. Colonus.i.inhitator. Delectu.i.differētia l'diſcretiōe.maſ ge.⁊ q̃rte decli.a delego.legis.legi. Curia utit hoc noie ſie.c. Almū.i.ſcm̄. Inſitū.me.cō.i.imiſū.ab iſeror.reris.iſitus.ſū.ad modū ſurculi q̄ arbori iſerit adiectm̄ ē. Emulatores.i.iuidos pſecutores. Diſcrimioſa.i.piculoſa. Agētib⁹.i.ↄuerſantib⁹. Eadē.me.cor. Alliſit.i.ſubmerſit. Degentiū.i.uiuētiū. Cōſternauit.i.deiecit.ↄſterno.as.tn̄ coit eſt deponēs. Anfractib⁹.i.tortuoſis excuſatiōib⁹.anfract⁹.maſ.ge.⁊ q̃rte decli.uia quā tenet lep⁹ i fugiēdo. Differē.i.explicare. Sup ipſa igl'a.i.ō. Edim⁹.i.ↄpoſuim⁹. Serioſius.i.ſtudioſius.a ſerio. Tu.i.parti. Inſultus.i.aggreſſuras ul' impetus. Emergētiū.i.ↄtigētiū. Scrupulū.i.remorſū.ppe lapillus eſt.maſ.ge. Nihilomin⁹.pe.cor.i.n̄ min⁹. Subnectit.i.iūgit. Succictorie.i.breuit. Indicat.me.p.i.iponat. Eaten⁹.pe.cor.i.in tātū. Cōdocet.me.cor. Quo.i.in quātū. Abdicationez.i.rez exclusionē. Alucos.i.riuulos. Loculos.i.burſas. Cōdecens.me.cor. Cōiicit.i.ↄnditur.l' pbatur.cōiicio.icis.coniicior.eris. Quinimmo.i.poti⁹. Abdicet.me.cō.i.ſeparet. Quōlibz.pe.cor.i.aliq̊ mō. Quomin⁹.i.ut.n̄ due ptes. Subrogādā.i.ſubſtituēda. Ingruenti.i.iminenti.ſiue iſtāti. Tractuz.i.ſpacium.maſ.ge.⁊ q̃rte decli. Innexū.i.adiūctū. Preſto.i.in pn̄tia. Serie.i.ſcripta. Prefatis.i.p̄dict. Superit.pe.cor. Coaptēt.i.ad ↄgruas expenſas p re emēda ſe reſtrigāt. Serioſa.i.ſtudioſa ⁊ ōliberata. Ictib⁹.i.pcuſſiōib⁹.maſ.ge.⁊ q̃rte decli. Aſtruit.i.affirmat ſiue pbat. Aduertentes.i.cōſiderātes. Paſſi.i.cōit.uel idifferenter.aduerbiū ē. Fulciāt.i.moneant ⁊ aſtrigāt. Hactenus.i.hucuſq3.aduerbiū loci. Cenobiis.i.monaſteriiſ.neu.ge. Adiiciens.i.addens. Quōlibet.pe.cor.i.aliq̊ mō. Uirus.i.uenenū.neu.ge.p tres caſus.s.ntm̄ actm̄ ⁊ vtm̄. Auſu.i.audacia.maſ.ge.⁊ q̃rte.decli.

Actum hoc opus Venetiis anno dñi.1479.nonas kalendas octubris per inclytum uirum Nicolaum Jenſon gallicum.

Page from Marchesinus' *Mammotrectus super Bibliam.* Printed by Nicolaus Jenson, Venice, 1479. Shows use of a type of modified Gothic design.



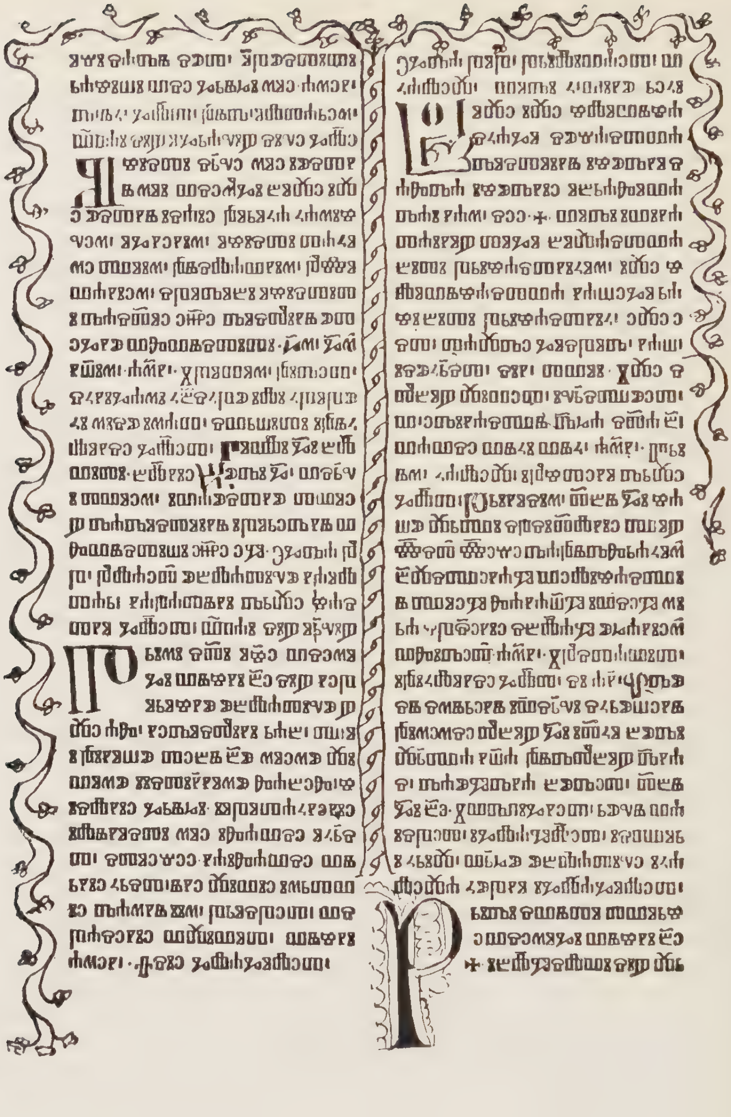
Jncipit miſſale ſecundum oꝛdiné
fratrum pꝛedicatoꝛum .
Dominica pꝛima in aduentu
domini officium
AD te leuaui animam
meam deus meus in te
confido:non erubeſcam
neque irrideant me ini
mici mei:⁊enim uniuer
ſi qui te expectant non
confundentur. ℣. Uias tuas domine de
monſtra mihi : ⁊ ſemitas tuas edoce me .
Gloꝛia . Non dicatur . Gloꝛia in
excelſis, per aduentum : niſi in fe
ſtis ſanctoꝛum Oratio.
EXcita queſumus domine po
tentiam tuam ⁊ ueni : ut ab
imminentibus peccatoꝝ noſtro
rum periculis:te mereamur pꝛote
gente eripi : te liberante ſaluari .
Qui uiuis ⁊ regnas Ad romanos
FRatres Scientes quia hoꝛa
eſt iam nos de ſomno ſurge
re. Nunc enim pꝛopioꝛ eſt noſtra
ſalus quam cuꝫ credidimus.nox
pꝛeceſſit:dies autem appꝛopiqua
uit. Abijciamus ergo opera tene
bꝛarum ⁊ induamur arma lucis :
ſicut in die honeſte ambulemus .
Non in cómeſſationibus ⁊ ebrie
tatibus:non in cubilibus ⁊ impu
dicitijs:non in contétione ⁊ emu
latione. Sed induimini dominuꝫ
Jeſum chꝛiſtum. ℟. Uniuerſi qui te
expectant non confundentur domine. ℣.
Uias tuas domine notas fac mihi:⁊ ſemi
tas tuas edoce me. Alleluia. ℣. Oſtende
nobis domine miſericoꝛdiam tuam: ⁊ ſalu
tare tuum da nobis . Sm̃ matheum .
IN illo tempoꝛe Cum appꝛo
pinquaſſet Jeſus hieroſoli
mis ⁊ ueniſſet bethphage ad mó
tem oliueti:tunc miſit duos diſci
pulos dicens eis. Jte in caſtelluꝫ
quod contra uos eſt ⁊ ſtatiꝫ inue
nietis aſinam alligatam ⁊ pulluꝫ
cum ea. Soluite ⁊ adducite mihi.
Et ſi quis uobis aliquid dixerit
dicite qꝛ dominus his opus ha
bet ⁊ confeſti dimittet eos. Hoc
autem totum factum eſt: ut adim
pleretur quod dictum eſt per pꝛo
phetam dicenté. Dicite filie ſion
Ecce rex tuus uenit tibi manſue
tus:ſedens ſuper aſinam ⁊ pulluꝫ
filium ſubiugalis. Euntes autem
diſcipuli fecerunt ſicut pꝛecepit il
lis Jeſus. Et adduxerunt aſiná
⁊ pullum:et impoſuerunt ſup eos
ueſtimenta ſua: et eum deſuper ſe
dere fecerunt. Plurima auteꝫ tur
ba ſtrauerunt ueſtimenta ſua in
uia . Alij autem cedebant ramos
de arboꝛibus ⁊ ſternebant in uia.
Turbe autem que pꝛecedebant ⁊
que ſequebantur:clamabant dicé
tes. Oſanna filio dauid . Benedi
ctus qui uenit in nomine domini
Offer . Ad te leuaui animam meá deus
meus in te confido:non erubeſcam:neque
irrideant me inimici mei : ⁊enim uniuerſi
q te expectant non ꝯfundentur Secreta
HEc ſacra nos domine pote
nti uirtute mundatos ad ſuú
faciant purioꝛes uenire pꝛincipiú
Per. Coio Dominus dabit benigni
tatem:⁊ terra noſtra dabit fructum ſuum.
Poſt communionem .
SUſcipiamus domine miſeri
coꝛdiam tuam in medio tem
pli tui: ⁊ reparationis noſtre uen
tura ſolemnia:ꝯgruis honoꝛibus
a i

First page of the *Missale Praedicatorum*. Printed by Andreas Torresanus, Venice, 1496.

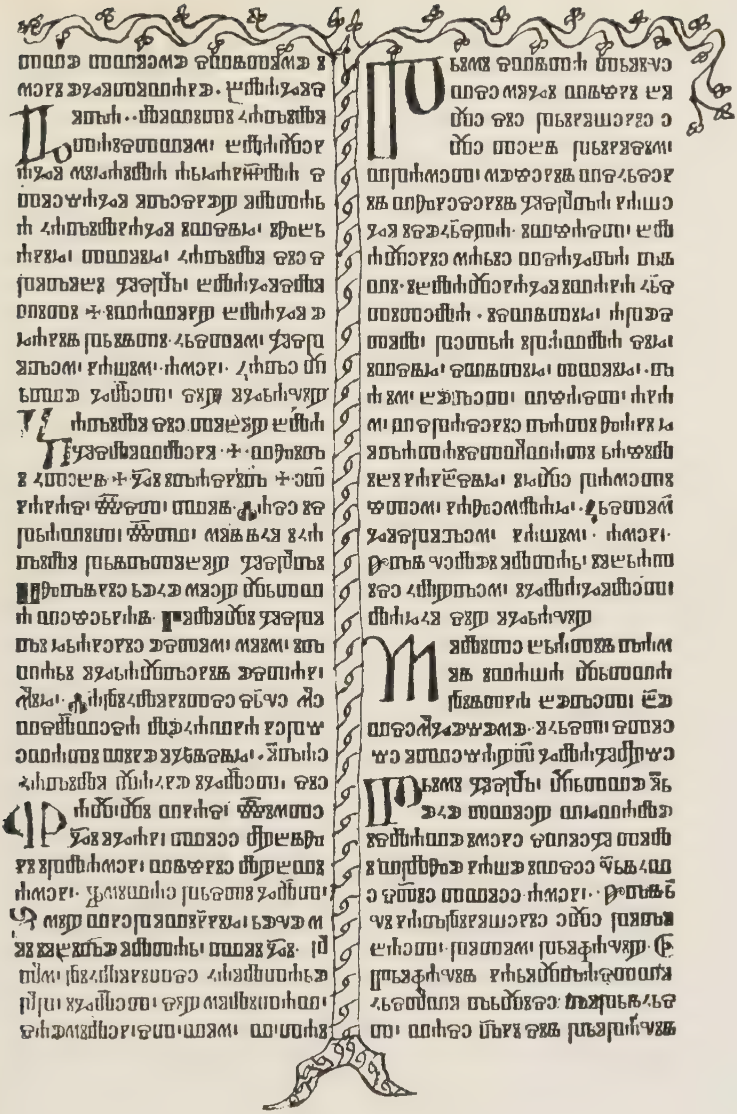
but the King's death in 1461 put an end to the project. Further reference to this event is made in Chapter XII.

Some of the histories of printing discuss the possibility of Jenson's having gone to Venice in 1461 and thus becoming that city's first printer. Credence is given to the possibility by the circumstance that a book, *Decor Puellarum*, printed by Jenson, bears in its colophon, in addition to his name and location, the date 1461. It is probable, however, that in setting up the date in Roman numerals (MCCCCLXI), an X was omitted by mistake. Jenson, although he boasted of the ability of the proofreaders in his employment, was somewhat careless in his colophons. In two of his books the dates are wrong: they were printed in 1470, but in one the date is 1400 and in the other 1570. These errors, of course, are excusable, but De Vinne calls attention in *Notable Printers of Italy during the Fifteenth Century* to one which is not to be so easily condoned. In the *Institutiones Oratoriae* of Quintilian, printed in 1471, its editor and corrector, Omnibonus Leonicenus, gives credit to Nicolaus Jenson for the invention of printing. "This untrue statement," says De Vinne, "could not have been inserted in the book without the knowledge of Jenson, who in some other books has allowed himself to be described with undeserved praise."

Jenson excelled in the element of typography and also usually, but not always, in presswork. His one Roman face has never been excelled in beauty of



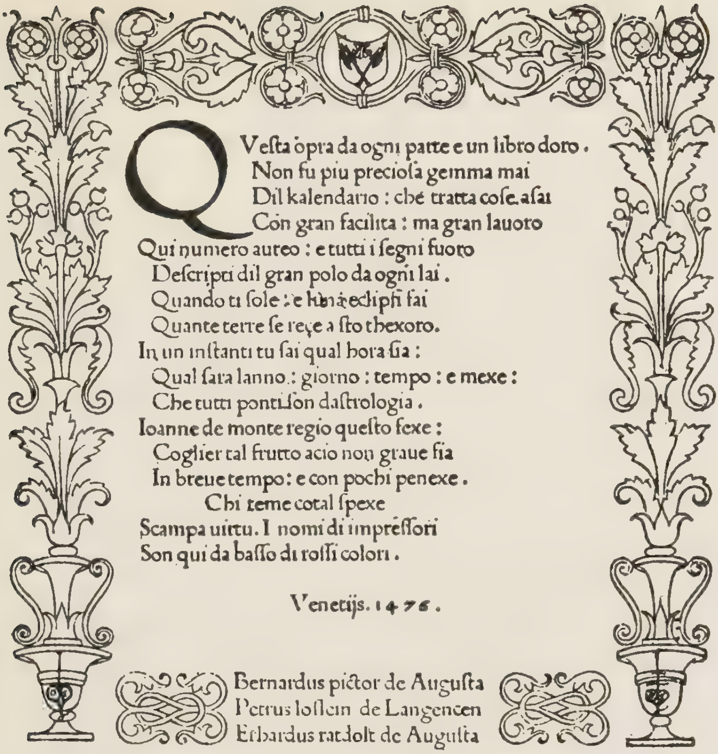
Facing pages from a South Slavic missal in Cyrillian characters and clagolytic types. Printed by Andreas Torresanus, Venice, 1483.



Type matter printed in red and black with initial letters and decorations done with a pen.

design and proportion. "Indeed," says Updike, "Jenson's Roman types have been the accepted models for Roman letters ever since he made them and, repeatedly copied in our own day, have never been equaled." Jenson's presswork in many instances inclined too much to paleness, caused both by lack of ink and by insufficient impression. It is held by some authorities that this paleness was intentionally imparted by Jenson to his printed sheets in order more nearly to approximate the "color" of the manuscript books. Updike holds this view. In a letter on the subject he says: "Jenson's pages of Roman type, while they do (as you say) lack ink and impression, also, I think, purposely lack black in the ink, which is brownish or yellowish. Many of the humanistic manuscripts that I have seen—although I speak from recollection—seem to me to have been somewhat pale in color, and the ink faded and yellowish."

Jenson printed at Venice only about ten years, but in that comparatively short time he accumulated a competence and was rated a wealthy man. A copy of his will has been preserved. He achieved not only wealth but honors. Pope Sixtus IV summoned him to Rome in 1475 and conferred upon him the title of Count Palatine. He was thus the first printer to become a member of the nobility. Jenson organized his business affairs into a corporation under the style of "Nicolaus Jenson et Socii." In 1480 an amalgamation of the business with that of John of Cologne, recently deceased, and of John Manthen, who had

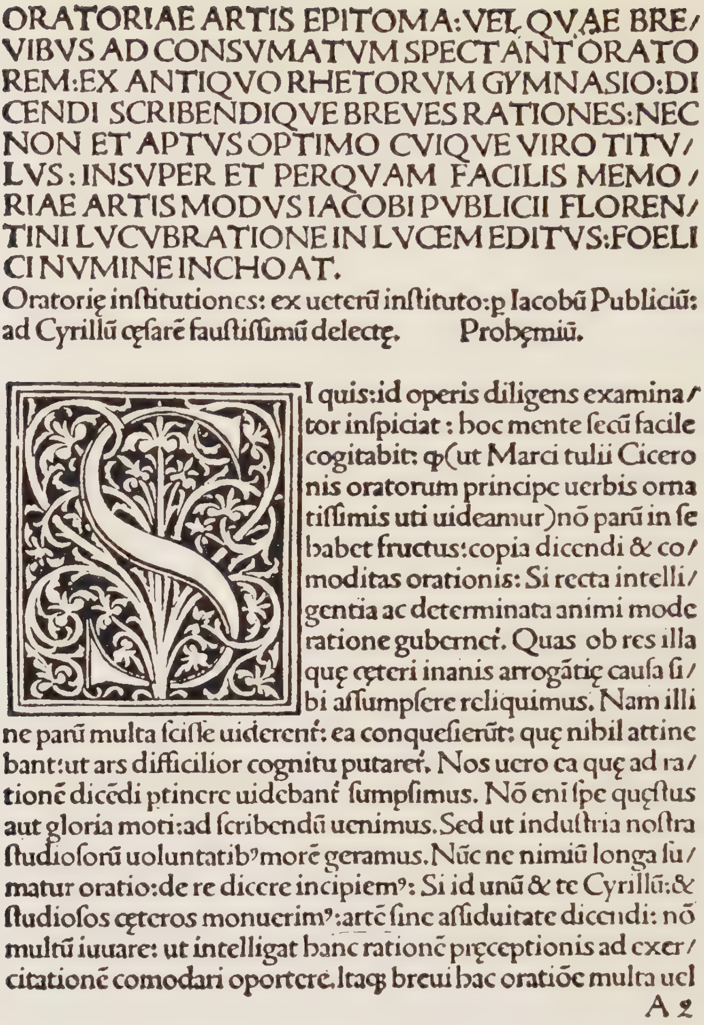


Queſta òpra da ogni parte e un libro doro.
Non fu piu precioſa gemma mai
Dil kalendario : che tratta coſe aſai
Cõn gran facilita : ma gran lauoro
Qui numero aureo : e tutti i ſegni fuoro
Deſcripti dil gran polo da ogni lai.
Quando ti ſole : e luna ecliphi fai
Quante terre ſe reçe a ſto thexoro.
In un inſtanti tu ſai qual hora ſia :
Qual ſara lanno : giorno : tempo : e mexe :
Che tutti ponti ſon daſtrologia.
Ioanne de monte regio queſto fexe :
Coglier tal frutto acio non graue ſia
In breue tempo : e con pochi penexe.
Chi teme cotal ſpexe
Scampa uirtu. I nomi di impreſſori
Son qui da baſſo di roſſi colori.

Venetijs. 1476.

Bernardus pictor de Auguſta
Petrus loſlein de Langencen
Erhardus ratdolt de Auguſta

Title page of Regiomontanus' *Calendarium*. Printed by Bernard Pictor (or Maler), Peter Löslein, and Erhard Ratdolt, Venice, 1476. This was the first complete printed title page.



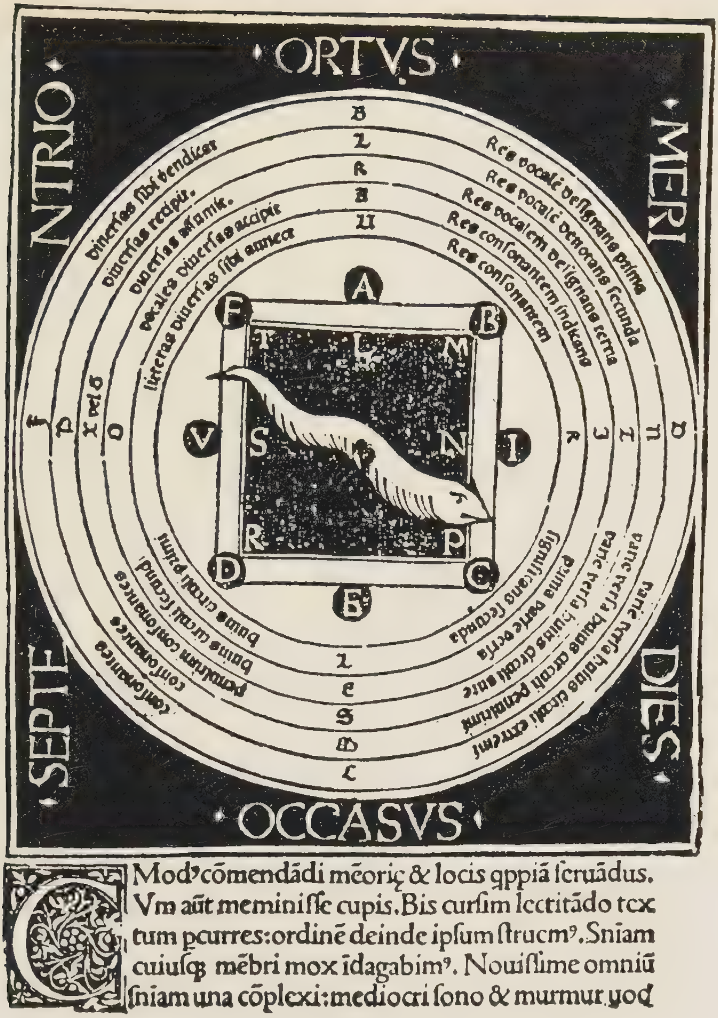
ORATORIAE ARTIS EPITOMA: VEL QVAE BREVIBVS AD CONSVMATVM SPECTANT ORATOREM: EX ANTIQVO RHETORVM GYMNASIO: DICENDI SCRIBENDIQVE BREVES RATIONES: NEC NON ET APTVS OPTIMO CVIQVE VIRO TITVLVS: INSVPER ET PERQVAM FACILIS MEMORIAE ARTIS MODVS IACOBI PVBLICII FLORENTINI LVCVBRATIONE IN LVCEM EDITVS: FOELICI NVMINE INCHOAT.

Oratorię inſtitutiones: ex ueterū inſtituto: ꝑ Iacobū Publiciū: ad Cyrillū cęſarē fauſtiſſimū delectę. Prohęmiū.

SI quis: id operis diligens examinator inſpiciat: hoc mente ſecū facile cogitabit: ꝙ (ut Marci tulii Ciceronis oratorum principe uerbis ornatiſſimis uti uideamur) nō parū in ſe habet fructus: copia dicendi & comoditas orationis: Si recta intelligentia ac determinata animi moderatione guberneť. Quas ob res illa quę cęteri inanis arrogātię cauſa ſibi aſſumpſere reliquimus. Nam illi ne parū multa ſciſſe uiderenť: ea conqueſierūt: quę nihil attinebant: ut ars difficilior cognitu putareť. Nos uero ea quę ad rationē dicēdi ꝑtinere uidebanť ſumpſimus. Nō eni ſpe quęſtus aut gloria moti: ad ſcribendū uenimus. Sed ut induſtria noſtra ſtudioſorū uoluntatibꝰ morē geramus. Nūc ne nimiū longa ſumatur oratio: de re dicere incipiemꝰ: Si id unū & te Cyrillū: & ſtudioſos cęteros monuerimꝰ: artē ſine aſſiduitate dicendi: nō multū iuuare: ut intelligat hanc rationē pręceptionis ad exercitationē comodari oportere. Itaqꝫ breui hac oratiōe multa uel

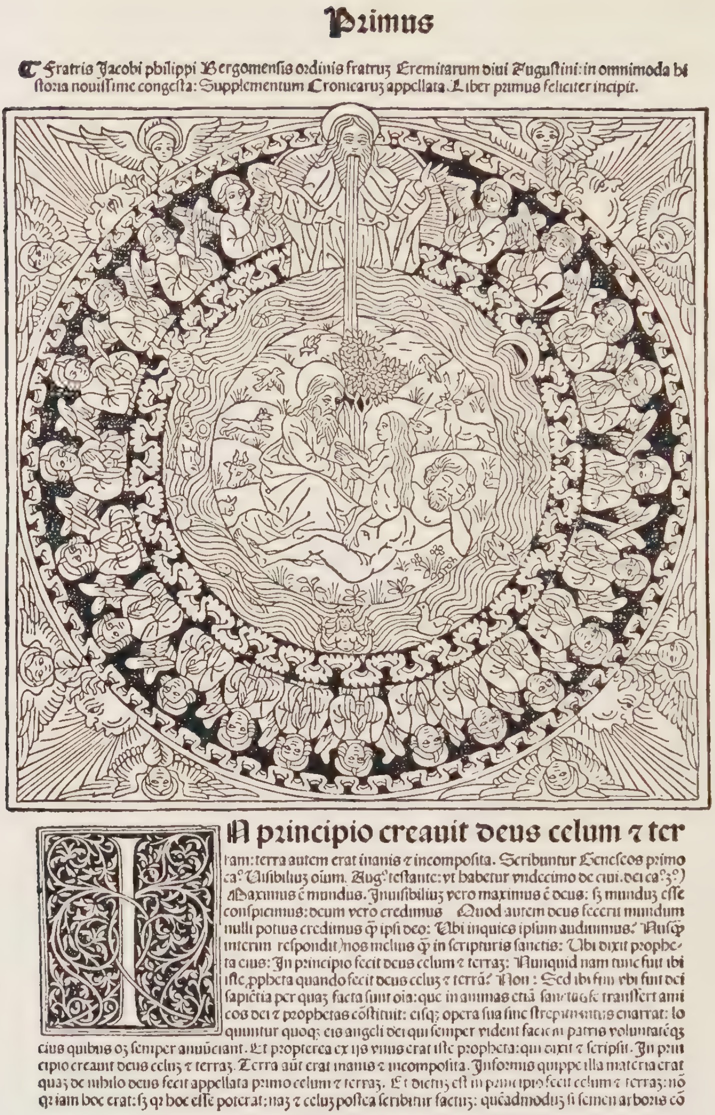
A 2

Two pages from Jacobus Publicius' *Artes Orandi Epistolandi Memorandi.* Printed by Erhard Ratdolt, Venice, 1485.


ORTVS
MERI
DIES
OCCASVS
SEPTE
NTRIO
Res vocalē deſignans prima
Res vocalē decorans ſecunda
Res vocalem deſignans tertia
Res conſonantem indicans
Res conſonantem
diverſas ſibi vendicat
diverſas recipit.
diverſas aſſumit.
vocales diverſas accipit
litteras diverſas ſibi annect
A
B
C
D
E
F
I
V
L
M
N
P
R
S
T

Modꝰ cōmendādi mēoriȩ & locis qppiā ſeruādus.
CVm aūt meminiſſe cupis. Bis curſim lectitādo textum pcurres:ordinē deinde ipſum ſtrucmꝰ. Sniam cuiuſqꝫ mēbri mox īdagabimꝰ. Nouiſſime omniū ſniam una cōplexi:mediocri ſono & murmur.yod

The pointer, printed separately, rotates on a pivot.



Primus

¶ Fratris Jacobi philippi Bergomenſis ordinis fratruz Eremitarum diui Auguſtini: in omnimoda hiſtoria nouiſſime congeſta: Supplementum Cronicaruz appellata. Liber primus feliciter incipit.

In principio creauit deus celum ⁊ terram: terra autem erat inanis ⁊ incompoſita. Scribuntur Geneſeos primo ca°. Viſibiliuz oium. Aug° teſtante: vt habetur vndecimo de ciui. dei ca° 3°.) Maximus ē mundus. Inuiſibiliuz vero maximus ē deus: ſz munduz eſſe conſpicimus: deum vero credimus. Quod autem deus fecerit mundum nulli potius credimus q̄ ipſi deo: Ubi inquies ipſum audiuimus? Nuſq̄ interim reſpondit/ nos melius q̄ in ſcripturis ſanctis: Ubi dixit propheta eius: In principio fecit deus celum ⁊ terraz: Nunquid nam tunc fuit ibi iſte propheta quando fecit deus celuz ⁊ terrā? Non: Sed ibi fuit vbi fuit dei ſapiētia per quaz facta ſunt oia: que in animas etiā ſanctas ſe transfert amicos dei ⁊ prophetas cōſtituit: eiſq; opera ſua ſine ſtrepitu enarrat: loquuntur quoq; eis angeli dei qui ſemper vident faciem patris voluntatēq; eius quibus oz ſemper annūciant. Et propterea ex iis vnus erat iſte propheta: qui dixit ⁊ ſcripſit. In principio creauit deus celuz ⁊ terraz. Terra aūt erat inanis ⁊ incompoſita. Informis quippe illa materia erat quaz de nihilo deus fecit appellata primo celum ⁊ terraz. Et dictuz eſt in principio fecit celum ⁊ terraz: nō q2 iam hoc erat: ſz q2 hoc eſſe poterat: naz ⁊ celuz poſtea ſcribitur factuz: quēadmoduz ſi ſemen arboris cō

Page from Bergomensis' *Supplementum Chronicarum*. Printed by Bernardinus de Benalius, Venice, 1486. Many of the cuts appear more than once under different captions. The book gives an account of the invention of printing, with mention of Gutenberg and Fust (see page 13).

succeeded the Speyer brothers, was effected. Jenson's death occurred probably in 1481.

Andreas Torresanus was the connecting link between two great Venetian printers. He succeeded to some of the materials of Nicolaus Jenson and later became the successor to Aldus Manutius. Torresanus had other partners, among them Bartholomaeus de Blauis and Maphaeus de Paterbonis. His name appears first as a printer in 1481, and between that year and 1500 he had a part in the production of nearly a hundred books. Proctor identifies Torresanus with 22 different type faces. His works were mostly of religious character, issued in small form. He is usually credited with being the first printer to use "catch-titles," that is, an abbreviated note at the bottom of the page.

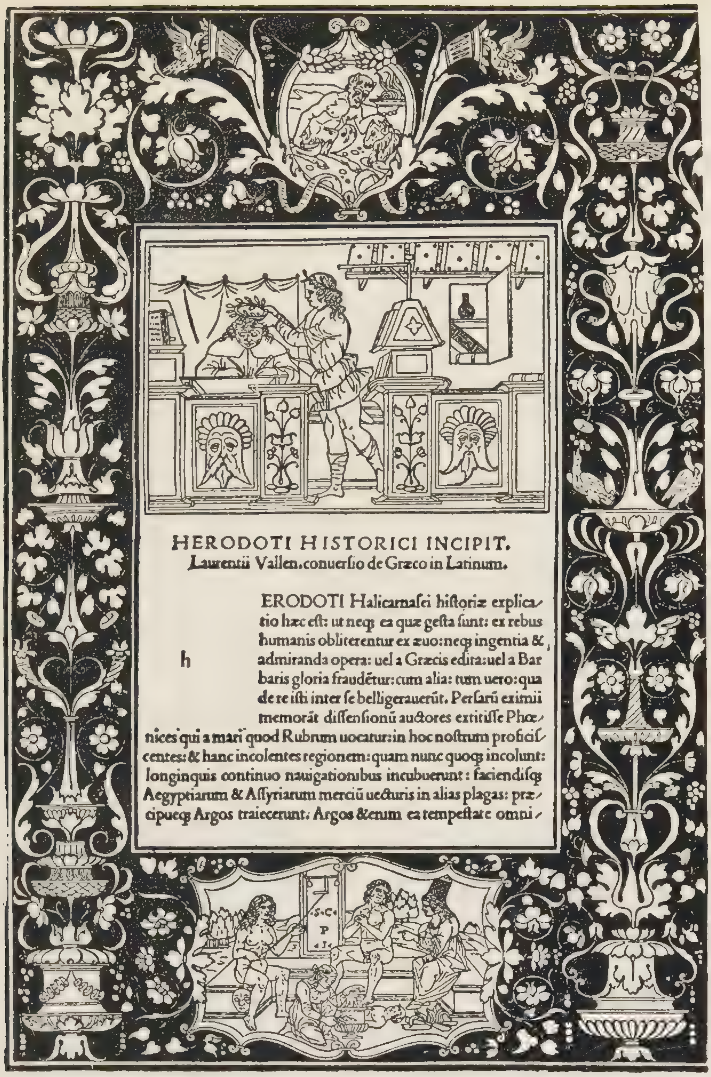
John Herbort was Jenson's successor. Herbort went to Italy from Seligenstadt, near Frankfort-on-Main. He printed first in Padua, and from there he went to Venice, where he began to print in 1481. His establishment became one of the largest in Europe. He died in 1484.

Erhard Ratdolt was the printer in Venice who ranks next to Jenson and Aldus. He arrived in Venice from Augsburg, his birthplace, in 1476, and remained for ten years. Ratdolt was a skilful and conscientious craftsman. Instead of leaving it to rubricators to fill in with the pen the spaces left for initial letters, he printed them in. Some authorities credit him with cutting his initials and borders on metal, but Redgrave, who made a special study of his work, believed they were cut on wood.

Ratdolt originated the decorated title page, as appears from the accompanying reproduction of the beautiful first page of the *Calendarium* of 1476. It differs from its present-day successors only in that it is in rhyme instead of prose. This, too, was the first title page to carry the printer's name. It will be noted that it gives, in addition to Ratdolt's name, those of his two associates, Bernardus Pictor and Petrus Löslein.

Ratdolt was the first printer to use a number of different colors on a single page, which he did in John de Sacro Busto's *Sphaera Mundi*, printed in 1485. Peter Schoeffer, it is true, used more than one color, but, excepting possibly in one case, not more than two. In the dedication of one of his works to the Doge, Ratdolt used gold ink, thus establishing another innovation. Redgrave gives the number of books produced by Ratdolt and his partners at Venice as 67.

Lucantonio Giunta is the Italian form of the name of the founder of a family of celebrated printers who operated in the fifteenth, sixteenth, and seventeenth centuries in Italy, France, and Spain. The latinized form of the name was Lucas Antonius Junta; the surname is sometimes written di Giunti or Zonta. Lucantonio printed in Venice, his first known production being dated 1482. He must have lived to a good old age since his name appears in the colophon of a book dated 1537. A monument to his memory

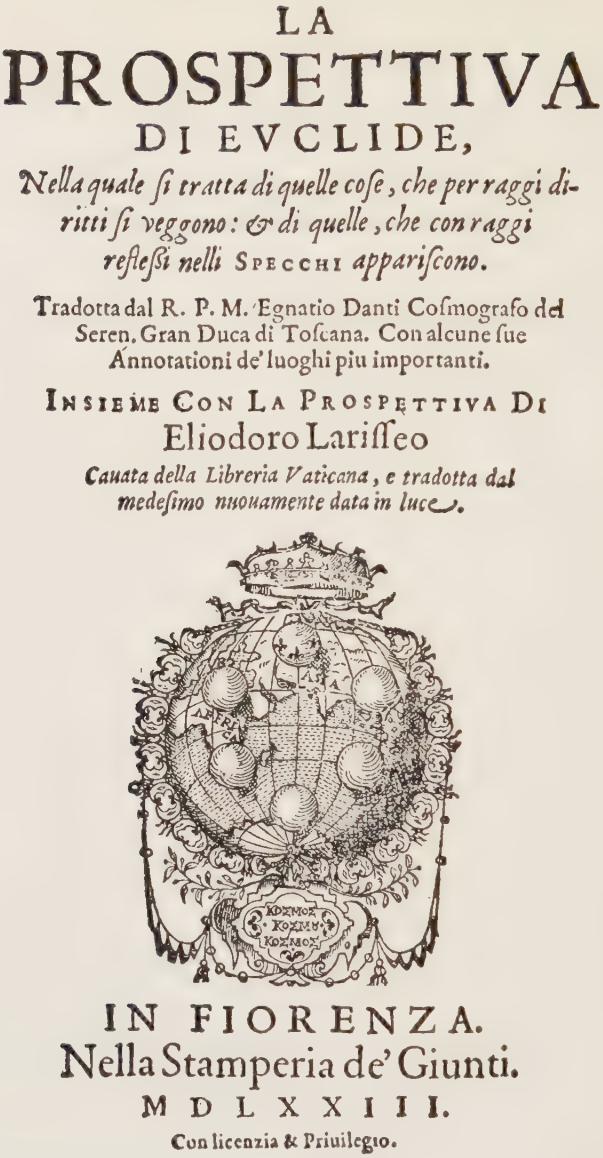


HERODOTI HISTORICI INCIPIT.
Laurentii Vallen. conuerſio de Græco in Latinum.

h

ERODOTI Halicarnaſci hiſtoriæ explicatio hæc eſt: ut neq; ea quæ geſta ſunt: ex rebus humanis obliterentur ex æuo: neq; ingentia & admiranda opera: uel a Græcis edita: uel a Barbaris gloria fraudētur: cum alia: tum uero: qua de re iſti inter ſe belligerauerūt. Perſarū eximii memorāt diſſenſionū auctores extitiſſe Phœnices qui a mari quod Rubrum uocatur: in hoc noſtrum proficiſcentes: & hanc incolentes regionem: quam nunc quoq; incolunt: longinquis continuo nauigationibus incubuerunt: faciendiſq; Aegyptiarum & Aſſyriarum merciū uecturis in alias plagas: præcipueq; Argos traiecerunt. Argos & enim ea tempeſtate omni-

Title page of Herodotus' *History*. Printed by John and George de Gregoriis, Venice, 1494.



LA
PROSPETTIVA
DI EVCLIDE,

Nella quale ſi tratta di quelle coſe, che per raggi diritti ſi veggono: & di quelle, che con raggi refleſſi nelli SPECCHI *appariſcono.*

Tradotta dal R. P. M. Egnatio Danti Coſmografo del Seren. Gran Duca di Toſcana. Con alcune ſue Annotationi de' luoghi piu importanti.

INSIEME CON LA PROSPETTIVA DI
Eliodoro Lariſſeo

Cauata della Libreria Vaticana, e tradotta dal medeſimo nuouamente data in luce.

ΚΟΣΜΟΣ
ΚΟΣΜΟΥ
ΚΟΣΜΟΣ

IN FIORENZA.
Nella Stamperia de' Giunti.
MDLXXIII.
Con licenzia & Priuilegio.

Title page of a Giunti book printed at Florence in 1573.

was erected in the Dominican Church of St. John and St. Paul in Venice. Filippo Giunta, Lucantonio's brother, established his Press in Florence. An Italian biographer called him "the Coryphaeur" (leader of printers). Bernardo and Thomaso Giunta were sons of Lucantonio, and they succeeded to the latter's business. Jacopo Giunta, whose relationship to the other members of the family is unknown, set up a Press in Lyons, France. Juan de Junta (to use the Spanish form of the name) printed in Burgos and Salamanca, Spain, from 1526 until near the close of the century. The family disappears from printing history after 1642.

Clemens Patavinus (Clement of Padua) is the name of the first "practical" native Italian printer. His only authentic book, the *Opera* of Johannes Mesue, a folio of 400 pages, appeared in Venice in 1471. He was a priest and claimed to have been self-taught in printing, "never having seen it actually exercised."

Other prominent printers in Venice were Bernardinus de Benalius, already referred to in Chapter II as the printer of the *Supplementum Chronicarum* of 1486 which attributed the invention of printing to Gutenberg and Fust jointly under the date 1458; Christopher Valdarfer, who printed in Venice between 1470 and 1474, the latter being the year of his removal to Milan; Bartholomew of Cremona, 1472–1474; Franz Renner, 1471–1483; Baptista de Tortis, 1480–1500. Best known of all is Aldus Manutius, whose career is treated in the following chapter.

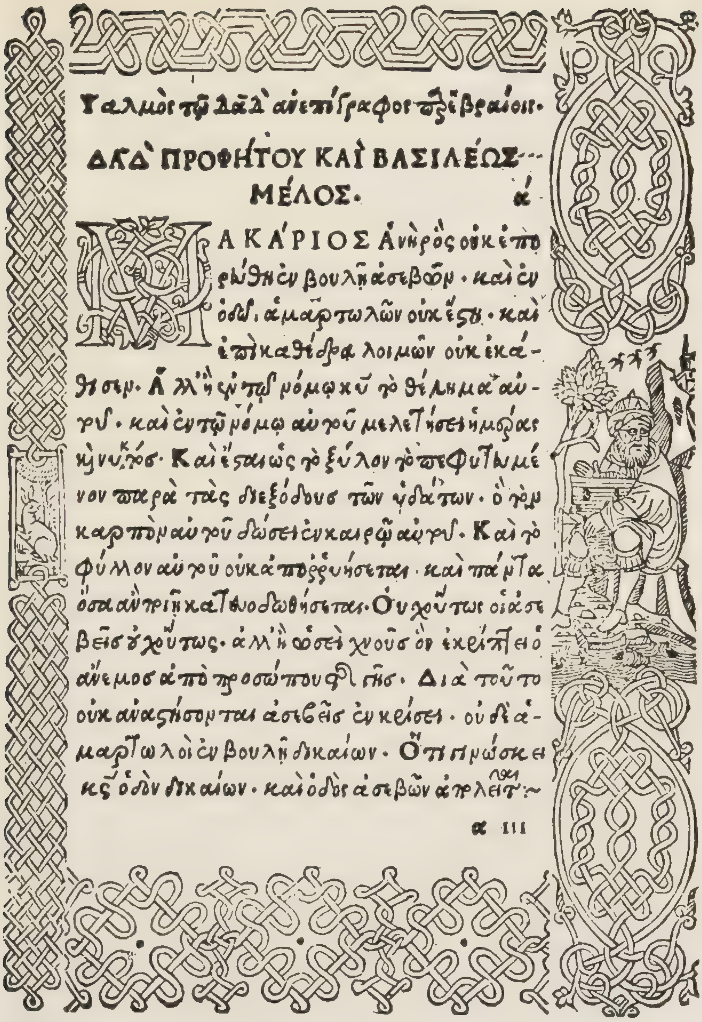
CHAPTER X

ALDUS MANUTIUS, GREAT PRINTER, PUBLISHER, AND EDITOR

THE great name in Venetian printing, the great name in Italian printing, one of the greatest names in printing of the fifteenth century and indeed of all centuries, is that of Aldus Manutius. He was not a follower, but a leader. He possessed the vision to discern new avenues of effort and the courage to follow the promptings of his convictions to final accomplishment.

In the twenty years during which Aldus operated his Press, he produced and published not less than 120 editions. They were mostly of the classics, both Latin and Greek, but it was his Greek editions that brought him his greatest distinction. When Aldus began to print, only a few of the Greek classics had been issued, and they only in part. Says Brown: "When he left off, Aristotle, Plato, Thucydides, Aristophanes, Euripides, Sophocles, Homer, Demosthenes, Æsop, and Pindar had been given to the world, most of them for the first time. It would be impossible to overrate the debt which Greek scholarship owes to Aldus."

Aldus was born at Sermoneta, near Rome, in 1450. His early training was that of a tutor, in which capacity he served several of the ducal families in Italy. He was in his forty-fifth year when he went to Venice



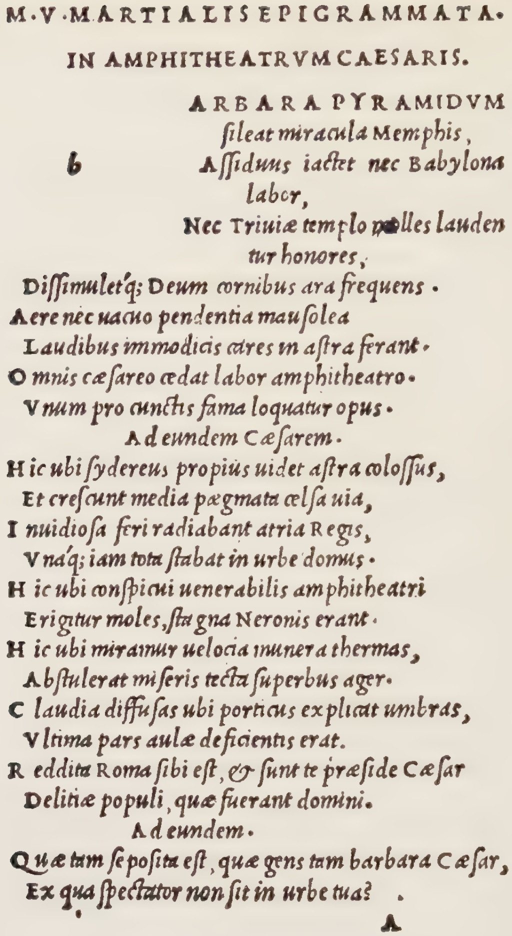
Ψαλμὸς τῷ Δαυὶδ ἀνεπίγραφος παρ' Ἑβραίοις.

ΔΑΥΙΔ ΠΡΟΦΗΤΟΥ ΚΑΙ ΒΑΣΙΛΕΩΣ
ΜΕΛΟΣ. α΄

ΜΑΚΑΡΙΟΣ ἀνὴρ ὃς οὐκ ἐπορεύθη ἐν βουλῇ ἀσεβῶν· καὶ ἐν ὁδῷ ἁμαρτωλῶν οὐκ ἔστη· καὶ ἐπὶ καθέδρᾳ λοιμῶν οὐκ ἐκάθισεν· ἀλλ' ἢ ἐν τῷ νόμῳ κυρίου τὸ θέλημα αὐτοῦ· καὶ ἐν τῷ νόμῳ αὐτοῦ μελετήσει ἡμέρας καὶ νυκτός. Καὶ ἔσται ὡς τὸ ξύλον τὸ πεφυτευμένον παρὰ τὰς διεξόδους τῶν ὑδάτων· ὃ τὸν καρπὸν αὐτοῦ δώσει ἐν καιρῷ αὐτοῦ. Καὶ τὸ φύλλον αὐτοῦ οὐκ ἀπορρυήσεται· καὶ πάντα ὅσα ἂν ποιῇ κατευοδωθήσεται. Οὐχ οὕτως οἱ ἀσεβεῖς οὐχ οὕτως· ἀλλ' ἢ ὡσεὶ χνοῦς ὃν ἐκρίπτει ὁ ἄνεμος ἀπὸ προσώπου τῆς γῆς. Διὰ τοῦτο οὐκ ἀναστήσονται ἀσεβεῖς ἐν κρίσει· οὐδὲ ἁμαρτωλοὶ ἐν βουλῇ δικαίων. Ὅτι γινώσκει κύριος ὁδὸν δικαίων· καὶ ὁδὸς ἀσεβῶν ἀπολεῖται:~

α iii

Page from a Greek Psalter, undated but mentioned by Aldus in his 1498 catalogue and therefore printed during or before that year.



M·V·MARTIALIS EPIGRAMMATA·

IN AMPHITHEATRVM CAESARIS.

ARBARA PYRAMIDVM ſileat miracula Memphis,
b Aſſiduus iactet nec Babylona labor,
Nec Triuiæ templo molles laudentur honores,
Diſſimuletq́; Deum cornibus ara frequens.
Aere nec uacuo pendentia mauſolea
Laudibus immodicis cares in aſtra ferant.
Omnis cæſareo cedat labor amphitheatro.
Vnum pro cunctis fama loquatur opus.

Ad eundem Cæſarem.

Hic ubi ſydereus propiùs uidet aſtra coloſſus,
Et creſcunt media pægmata celſa uia,
Inuidioſa feri radiabant atria Regis,
Vnaq́; iam tota ſtabat in urbe domus.
Hic ubi conſpicui uenerabilis amphitheatri
Erigitur moles, ſtagna Neronis erant.
Hic ubi miramur uelocia munera thermas,
Abſtulerat miſeris tecta ſuperbus ager.
Claudia diffuſas ubi porticus explicat umbras,
Vltima pars aulæ deficientis erat.
Reddita Roma ſibi eſt, & ſunt te præſide Cæſar
Delitiæ populi, quæ fuerant domini.

Ad eundem.

Quæ tam ſepoſita eſt, quæ gens tam barbara Cæſar,
Ex qua ſpectator non ſit in urbe tua?

A

First reading page of Martial's *Epigrams.* Printed by Aldus, Venice 1501.

with his plan to issue Greek classics. He found no suitable Greek type available; his predecessors did not make a practice of using it, but usually left blanks on the printed page for Greek words to be written in with the pen.

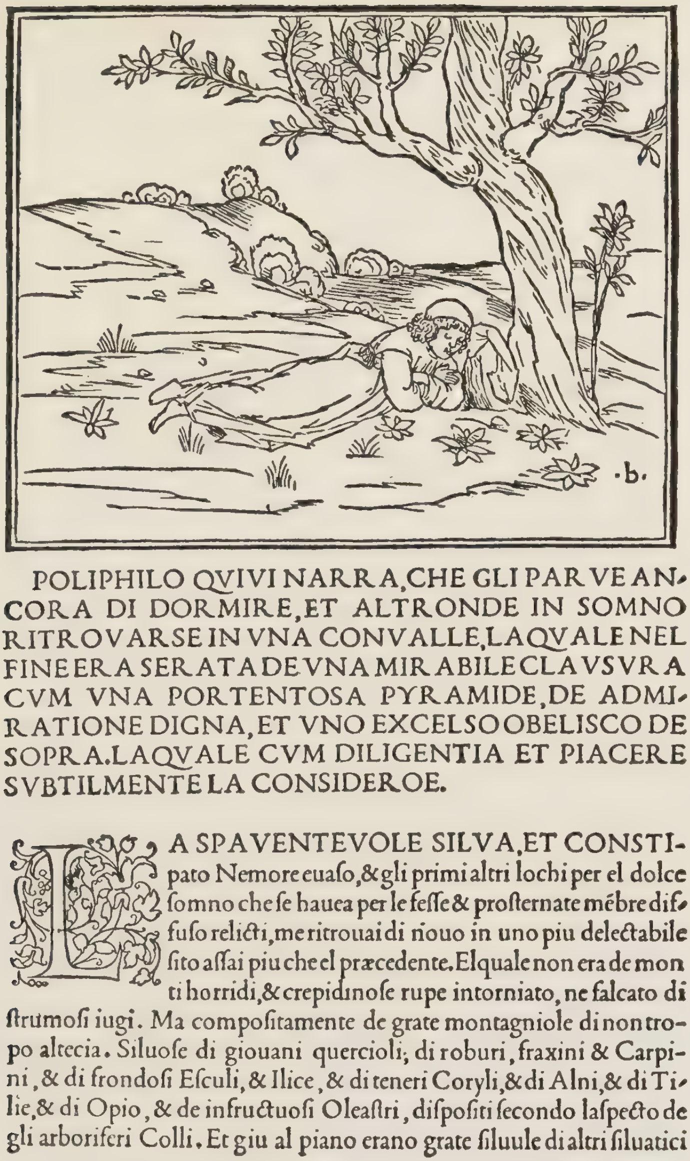
Although Greek letters had been cut and used to a limited extent in Rome, Milan, and Florence, their design was clumsy and faulty. Aldus proceeded at once to have a complete font of Greek type designed and cut, and that it was no small task is attested by the fact that because of the necessary accents and ligatures the font comprised some six hundred different characters.

A Greek and Latin grammar, issued in 1495, was the first production of Aldus' Press. Then came, also in 1495, the first volume of a five-volume edition of Aristotle, the set reaching completion in 1498. "Before the year 1500," says De Vinne, "he had printed editions, in folio, of Theocritus, Bion, Moschus, Aristophanes, Dioscorides, and four more works of Aristotle, and others. To produce these books he had to direct the making of three fonts of Greek and two of Roman types, to organize a great printing house and superintend the work of many men from the composition of the types to the binding and selling of the books. This was work enough for a man of ordinary ability; but Aldus did more. He prepared the copy for the books, rewrote two Greek grammars and a new Greek lexicon, read all the proofs and kept up an extended correspondence." It is not surprising, comments De Vinne, that Aldus once wrote: "In this seventh year of my self-imposed task, I can truly say —yes under oath—that I have not, during these long years, had one hour peaceful rest."

Aldus introduced two notable innovations, the small book that could be comfortably held in one hand while in use and that would fit the pocket, and the use of what is now called the Italic type face, the first closely set condensed type face. De Vinne calls attention to the fact that Aldus was responsible for a third important innovation, that of small capitals. These were not, however, small capitals in the modern sense. Aldus used only one size of capitals, but they did not reach the height of the lower-case ascenders.

From a business point of view Aldus operated under difficulties. His twenty years of experience covered four wars, those of 1500, 1506, 1510, and 1511, in which Venice was engaged. He had in large measure to look abroad for his book market, and even in ordinary times there were no regularly organized channels for such commerce. Aldus sold his small books at a low price, but he had to find a method of distribution for them.

Aldus received privileges from the Venetian Council in addition to that which for ten years gave him exclusive use of his new Italic type face, but like it they were of no avail outside of Venice. Privileges granted him by the Pope were also of limited effect, consequently he suffered from the competition of pirated editions, issued in other countries and in other



POLIPHILO QVIVI NARRA, CHE GLI PARVE ANCORA DI DORMIRE, ET ALTRONDE IN SOMNO RITROVARSE IN VNA CONVALLE, LAQVALE NEL FINE ERA SERATA DE VNA MIRABILE CLAVSVRA CVM VNA PORTENTOSA PYRAMIDE, DE ADMIRATIONE DIGNA, ET VNO EXCELSO OBELISCO DE SOPRA. LAQVALE CVM DILIGENTIA ET PIACERE SVBTILMENTE LA CONSIDEROE.

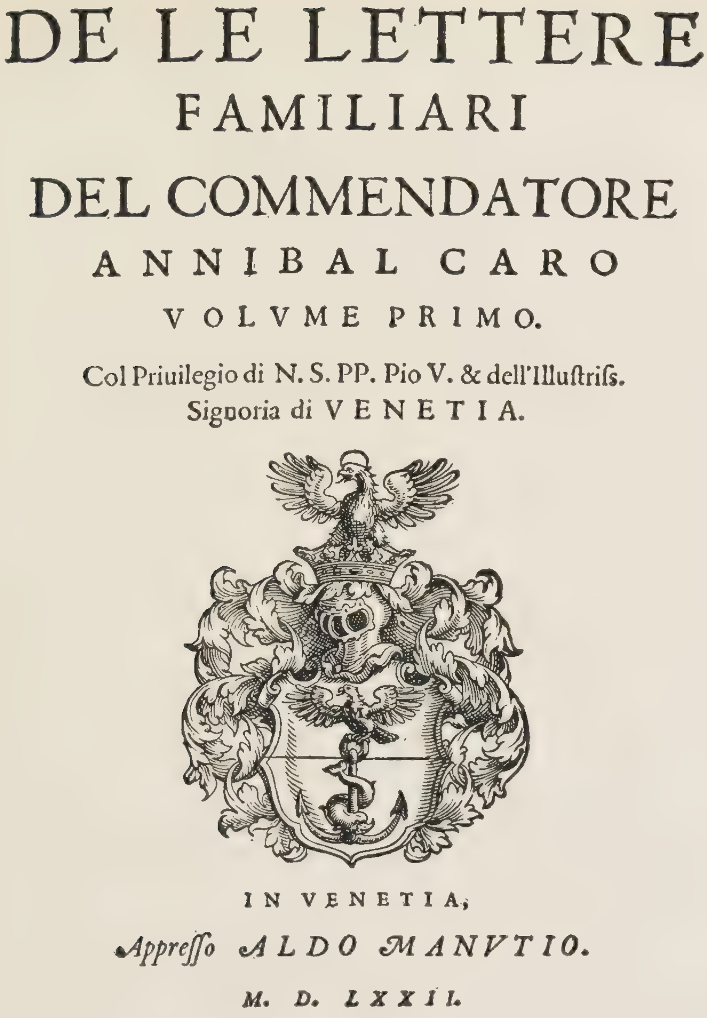
LA SPAVENTEVOLE SILVA, ET CONSTIpato Nemore euaſo, & gli primi altri lochi per el dolce ſomno che ſe hauea per le feſſe & proſternate mēbre diffuſo relicti, me ritrouai di nouo in uno piu delectabile ſito aſſai piu che el præcedente. Elquale non era de monti horridi, & crepidinoſe rupe intorniato, ne falcato di ſtrumoſi iugi. Ma compoſitamente de grate montagniole di non tropo altecia. Siluoſe di giouani quercioli, di roburi, fraxini & Carpini, & di frondoſi Eſculi, & Ilice, & di teneri Coryli, & di Alni, & di Tilie, & di Opio, & de infructuoſi Oleaſtri, diſpoſiti ſecondo laſpecto de gli arboriferi Colli. Et giu al piano erano grate ſiluule di altri ſiluatici

Page from the *Hypnerotomachia Poliphili*, showing the admirable relation of type, decorated initial, and illustration. Printed by Aldus, Venice, 1499.

parts of Italy. Not only was the text of his books appropriated, but their form and style were copied, and in some instances the imitations even bore Aldus' name.

Aldus' most famous book, the *Hypnerotomachia Poliphili* ("Poliphili's Strife of Love in a Dream"), was published in 1499. It was written by Francesco Colonna, a monk of the Order of St. Dominic, who was born probably in 1433 and died in 1527. There were 234 unnumbered pages, each 8¼×13 inches in size. The chapters begin with decorative initials, which, when put together in the order in which they appear, spell the name and title of the author: POLIAM FRATER FRANCISCUS COLUMNA PERAMAVIT. The uniform harmony of the engravings and typography makes the volume probably the finest specimen of Italian printing of the fifteenth century.

Himself a scholar of considerable attainments, Aldus found easy association with the learned men of his time. Most noted of these was Desiderius Erasmus, who lived in Aldus' house during the two years he spent in Venice, beginning in 1506. Erasmus supervised the issue of a number of classics and a revised edition of his own *Proverbs.* Aldus later published others of his works. John Reuchlin and Marcus Musurus were other great scholars with whom Aldus engaged in literary undertakings. According to one biographer (Didot), however, Aldus himself accomplished more than the greatest scholars of his time for the spread of learning and the development of literature.



DE LE LETTERE FAMILIARI DEL COMMENDATORE

ANNIBAL CARO

VOLVME PRIMO.

Col Priuilegio di N. S. PP. Pio V. & dell'Illuſtriſs.
Signoria di VENETIA.

IN VENETIA,
Appreſſo ALDO MANVTIO.
M. D. LXXII.

An Aldus title page, Venice, 1572.

Putnam quotes an interesting letter written by Aldus in 1514 to his friend Navagerus:

> I am hampered in my work by a thousand interruptions. Nearly every hour comes a letter from some scholar, and if I undertook to reply to them all, I should be obliged to devote day and night to scribbling. Then, through the day come calls from all kinds of visitors. Some desire merely to give a word of greeting, others want to know what there is new, while the greater number come to my office because they happen to have nothing else to do. "Let us look in upon Aldus," they say to each other. Then they loaf in and sit and chatter to no purpose. Even these people with no business are not so bad as those who have a poem to offer or something in prose (usually very prosy indeed) which they wish to see printed with the name of Aldus. These interruptions are now becoming too serious for me, and I must take steps to lessen them. Many letters I simply leave unanswered, while to others I send very brief replies; and as I do this not from pride or from discourtesy, but simply in order to be able to go on with my task of printing good books, it must not be taken hardly.
>
> As a warning to the heedless visitors who use up my office hours to no purpose, I have now put up a big notice on the door of my office to the following effect: "Whoever thou art, thou art earnestly requested by Aldus, to state thy business briefly and to take thy departure promptly. In this way thou mayst be of service even as was Hercules to the weary Atlas. For this is a place of work for all who may enter."

Aldus' famous device of the anchor and dolphin was suggested by the reverse of a silver coin of Vespasian.

Aldus married in 1500 the daughter of the printer Andreas Torresanus, who, as has been said, had succeeded to the materials of Nicolaus Jenson. In 1507 the two printing establishments were united. Aldus died in 1515 at the age of sixty-five. The business was continued under the management of Torresanus until 1529, when Aldus' son Paul took charge. Eleven years later Paul's son, Aldus, his grandfather's namesake, was taken into partnership. With the latter's death in 1597, one hundred and two years after the founding of the Press, the family became extinct.

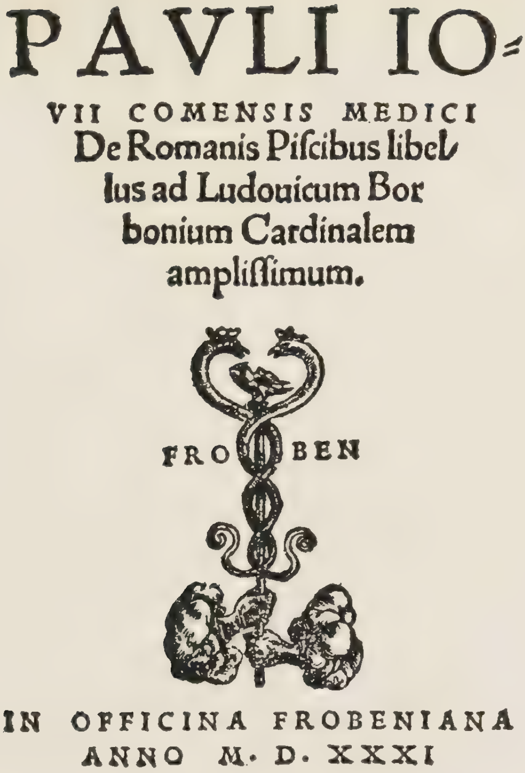
CHAPTER XI

FROBEN AND ERASMUS

IN the year 1514 a middle-aged man entered the printing office of John Froben in the city of Basel, Switzerland, bearing a letter which he presented with the request that it be read. Froben found the communication to be from the well-known Dutch scholar, Desiderius Erasmus, one of whose books, *Adagiorum Chiliades*, he had already printed and published with complimentary references to the author, whom, however, he had never met. The stranger in presenting his letter explained to Froben that he was an intimate friend of its author, that he resembled him in appearance, and that any arrangement into which he might enter would be considered by Erasmus as binding as if made by himself.

Froben was not deceived, seeing at once that the author of the letter and its bearer were one and the same person. Erasmus' reputation as a practical joker probably had preceded him. He must have had such a reputation, for several years before he had begun his acquaintance with Sir Thomas More, the learned Lord Chancellor of England, in somewhat the same manner.

Thus was inaugurated a friendship which is unique in printing annals, a friendship which was to mean much to the cause of good printing and good litera-

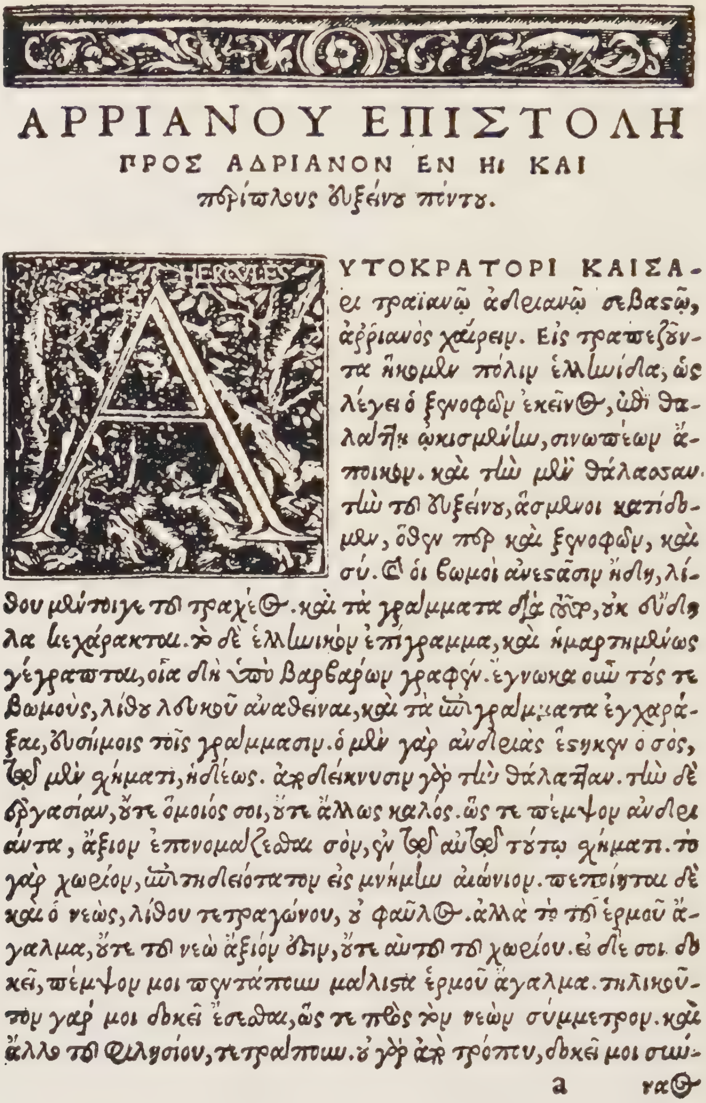


PAVLI IOVII COMENSIS MEDICI
De Romanis Piſcibus libellus ad Ludouicum Borbonium Cardinalem
ampliſſimum.

FRO BEN

IN OFFICINA FROBENIANA
ANNO M. D. XXXI

A Froben title page, Basel, 1531.



ΑΡΡΙΑΝΟΥ ΕΠΙΣΤΟΛΗ
ΠΡΟΣ ΑΔΡΙΑΝΟΝ ΕΝ ΗΙ ΚΑΙ
περίπλους εὐξείνου πόντου.

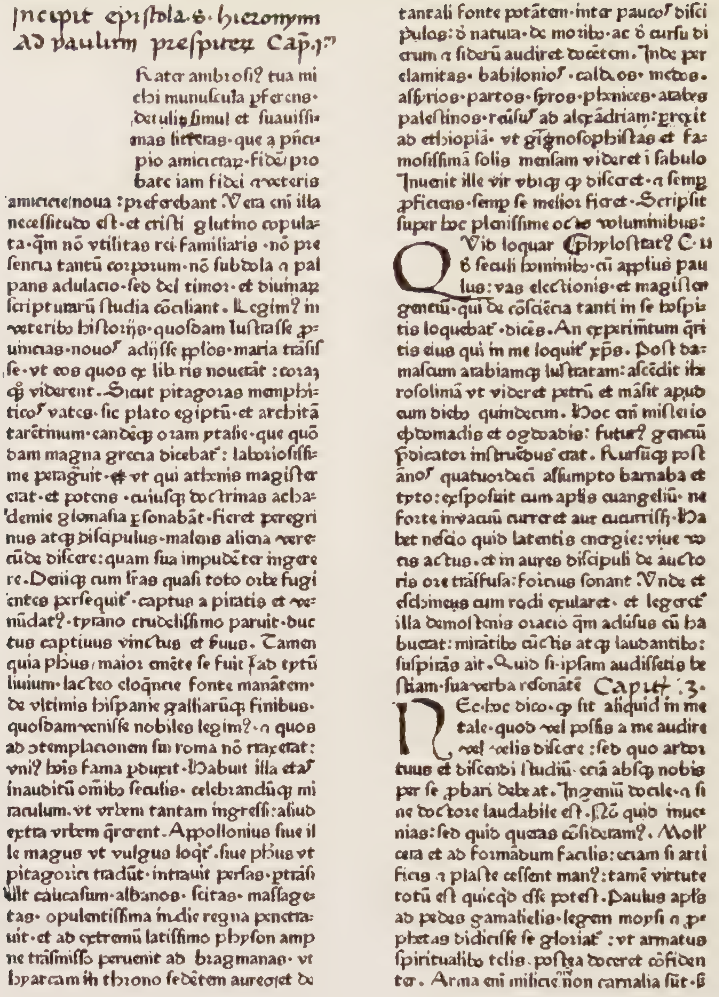
ΑΥΤΟΚΡΑΤΟΡΙ ΚΑΙΣΑρι τραϊανῷ ἀδριανῷ σεβαστῷ, ἀρριανὸς χαίρειν. Εἰς τραπεζοῦντα ἥκομεν πόλιν ἑλληνίδα, ὡς λέγει ὁ ξενοφῶν ἐκεῖνος, ἐπὶ θαλάττῃ ᾠκισμένην, σινωπέων ἄποικον. καὶ τὴν μὲν θάλασσαν τὴν τοῦ εὐξείνου, ἄσμενοι κατίδομεν, ὅθενπερ καὶ ξενοφῶν, καὶ σύ. καὶ οἱ βωμοὶ ἀνεστᾶσιν ἤδη, λίθου μέντοιγε τοῦ τραχέος. καὶ τὰ γράμματα διὰ τοῦτο, οὐκ εὔδηλα κεχάρακται. τὸ δὲ ἑλληνικὸν ἐπίγραμμα, καὶ ἡμαρτημένως γέγραπται, οἷα δὴ ὑπὸ βαρβάρων γραφέν. ἔγνωκα οὖν τούς τε βωμοὺς, λίθου λευκοῦ ἀναθεῖναι, καὶ τὰ γράμματα ἐγχαράξαι, εὐσήμοις τοῖς γράμμασιν. ὁ μὲν γὰρ ἀνδριὰς ἕστηκεν ὁ σὸς, τῷ μὲν σχήματι, ἡδέως. ἀποδείκνυσι γὰρ τὴν θάλατταν. τὴν δὲ ἐργασίαν, οὔτε ὅμοιός σοι, οὔτε ἄλλως καλός. ὥς τε πέμψον ἀνδριάντα, ἄξιον ἐπονομάζεσθαι σὸν, ἐν τῷ αὐτῷ τούτῳ σχήματι. τὸ γὰρ χωρίον, ἐπιτηδειότατον εἰς μνήμην αἰώνιον. πεποίηται δὲ καὶ ὁ νεὼς, λίθου τετραγώνου, οὐ φαῦλος. ἀλλὰ τὸ τοῦ ἑρμοῦ ἄγαλμα, οὔτε τοῦ νεὼ ἄξιόν ἐστιν, οὔτε αὐτοῦ τοῦ χωρίου. εἰ δέ σοι δοκεῖ, πέμψον μοι πεντάπουν μάλιστα ἑρμοῦ ἄγαλμα. τηλικοῦτον γάρ μοι δοκεῖ ἔσεσθαι, ὥς τε πρὸς τὸν νεὼν σύμμετρον. καὶ ἄλλο τοῦ φιλησίου, τετράπουν. οὐ γὰρ ἀπὸ τρόπου, δοκεῖ μοι σύν-

a ναος

Page from a Froben book in Greek, Basel, 1533.

ture. Froben was a great printer and publisher, one of the greatest of his time, ranking with Koberger in Nuremberg, Aldus in Venice, and Badius in Paris. Erasmus was a great writer, probably the most intellectual man of his time, and the first producer in history of "best sellers." Of the *Adagiorum*, authorized editions were issued by various printers in different languages in a number of cities, amounting during Erasmus' lifetime to 30,000 copies—a very large quantity for a book in those days and greatly exceeding any previous record. There were besides many unauthorized editions. *Praise of Folly* is said to have had the largest sale of any book printed up to that time except the Bible. Only one contemporaneous author, Martin Luther, vied with Erasmus in popularity. But Luther's writings circulated almost exclusively in Germany, whereas the books of Erasmus were equally in demand in Germany, France, Italy, and England.

It is not only his literary friendships and his popularity as an author, however, that give Erasmus a place in printing history. He was the literary adviser of Froben, and for a shorter time, as we have seen, of Aldus in Venice; and he served them both, Froben in particular, as proofreader, or as the term then was, press corrector. Erasmus' career marks also a stage in the rearing of the structure on which the business of printing and publishing is based. He was the first author to make a substantial part of his living by his pen. Authors before him had to be content for their



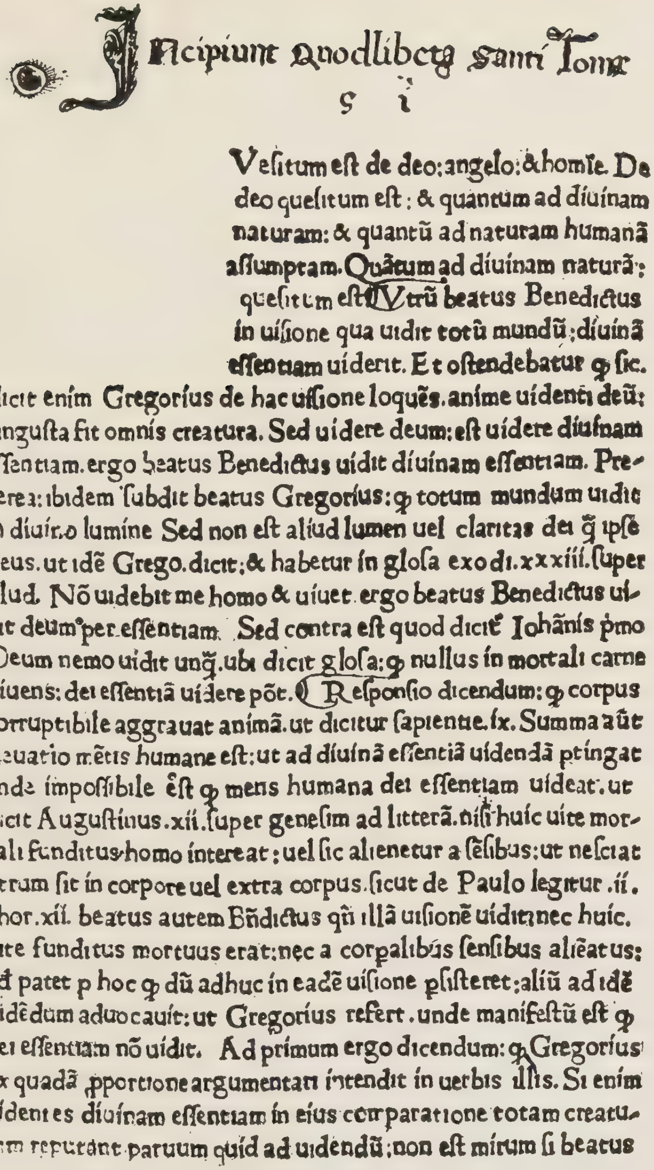
Incipit epistola·s·hieronymi ad paulinum presbiterum Cap. j.

Frater ambrosi⁹ tua michi munuscula perferens· detulit simul et suauissimas litteras· que a principio amiciciarum· fidem probate iam fidei et veteris amicicie noua : preferebant. Vera enī illa necessitudo est· et cristi glutino copulata· q̄m nō vtilitas rei familiaris· nō presencia tantū corporum· nō subdola et palpans adulacio· sed dei timor· et diuinarum scripturarū studia cōciliant. Legim⁹ in veteribus historiis· quosdam lustrasse prouincias· nouorum adiisse populos· maria transisse· vt eos quos ex libris nouerāt : coram quoque viderent. Sicut pitagoras memphiticorum vates· sic plato egiptū· et architā tarētinum· eandemque oram ytalie· que quondam magna grecia dicebatur : laboriosissime peragrauit· et vt qui athenis magister erat· et potens· cuiusque doctrinas achademie gignasia personabāt· fieret peregrinus atque discipulus· malens aliena verecūde discere : quam sua impudēter ingerere. Denique cum litteras quasi toto orbe fugientes persequitur· captus a piratis et venūdatus· tyranno crudelissimo paruit· ductus captiuus vinctus et seruus. Tamen quia philosophus maior emēte se fuit. Ad tytū liuium· lacteo eloquencie fonte manātem· de vltimis hispanie galliarūque finibus· quosdam venisse nobiles legim⁹· et quos ad contemplacionem sui roma nō traxerat : vnius hominis fama perduxit. Habuit illa etas inauditū omnibus seculis· celebrandūque miraculum. vt vrbem tantam ingressi : aliud extra vrbem quererent. Appollonius siue ille magus vt vulgus loquitur· siue philosophus vt pitagorici tradūt· intrauit persas· pertransiuit caucasum· albanos· scitas· massagetas· opulentissima indie regna penetrauit· et ad extremū latissimo physon amne trāsmisso peruenit ad bragmanas· vt hyarcam in throno sedētem aureo et de tantali fonte potātem· inter paucos discipulos : de natura· de moribus· ac de cursu dierum et siderū audiret docētem. Inde per elamitas· babilonios· caldeos· medos· assyrios· partos· syros· phenices· arabes palestinos· reuersus ad alexādriam : perrexit ad ethiopiā· vt gignosophistas et famosissimā solis mensam videret in sabulo. Inuenit ille vir vbique quod disceret· et semper proficiens· semper se melior fieret. Scripsit super hoc plenissime octo voluminibus :

Quid loquar Phylostratus. C. ii de seculi hominibus· cū apostolus paulus : vas electionis· et magister gencium· qui de consciēcia tanti in se hospitis loquebatur· dicēs. An experimentum queritis eius qui in me loquitur christus. Post damascum arabiamque lustratam : ascēdit iherosolimā vt videret petrū et mansit apud eum diebus quindecim. Hoc enī misterio ebdomadis et ogdoadis : futurus gencium predicator instruendus erat. Rursumque post annos quatuordecim assumpto barnaba et tyto : exposuit cum apostolis euangeliū· ne forte in vacuū curreret aut cucurrisset. Habet nescio quid latentis energie : viue vocis actus. et in aures discipuli de auctoris ore trāsfusa : forcius sonant. Vnde et eschineus cum rodi exularet· et legeretur illa demostenis oracio q̄m aduersus eū habuerat : mirātibus cunctis atque laudantibus : suspirās ait. Quid si ipsam audissetis bestiam· sua verba resonātē Caput .3.

Non hec dico· quod sit aliquid in me tale· quod vel possis a me audire vel velis discere : sed quo ardor tuus et discendi studiū· eciā absque nobis per se probari debeat. Ingeniū docile· et sine doctore laudabile est. Non quid inuenias : sed quid queras cōsideram⁹. Mollis cera et ad formādum facilis : eciam si artificis et plaste cessent man⁹ : tamē virtute totū est quicquid esse potest. Paulus apostolus ad pedes gamalielis· legem moysi et prophetas didicisse se gloriatur : vt armatus spiritualibus telis. postea doceret cōfidenter. Arma enī milicie nostre non carnalia sūt· s

First page of a Latin Bible printed by Berthold Ruppel, Basel, 1468. One of the first three and possibly the first of the books printed in Switzerland.



Jncipiunt Quodlibeta ſancti Tome
q i

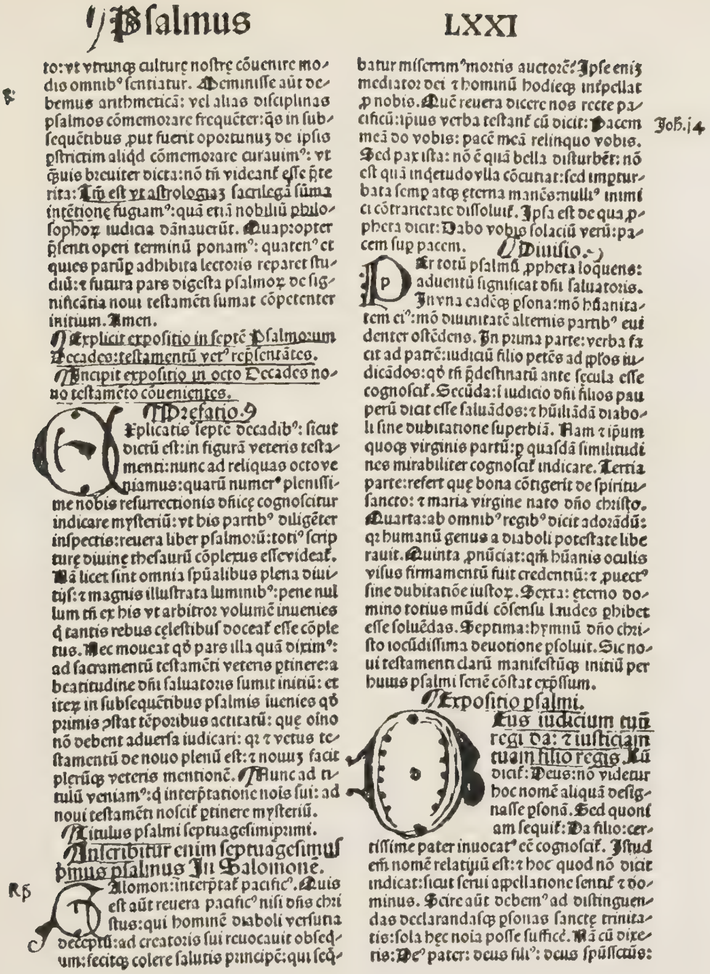
Veſitum eſt de deo: angelo: & homīe. De deo queſitum eſt: & quantum ad diuinam naturam: & quantū ad naturam humanā aſſumptam. Quātum ad diuinam naturā: queſitum eſt. Vtrū beatus Benedictus in uiſione qua uidit totū mundū: diuinā eſſentiam uiderit. Et oſtendebatur ꝙ ſic. dicit enim Gregorius de hac uiſione loquēs. anime uidenti deū: anguſta fit omnis creatura. Sed uidere deum: eſt uidere diuinam eſſentiam. ergo beatus Benedictus uidit diuinam eſſentiam. Preterea: ibidem ſubdit beatus Gregorius: ꝙ totum mundum uidit in diuino lumine Sed non eſt aliud lumen uel claritas dei q̄ ipſe deus. ut idē Grego. dicit: & habetur in gloſa exodi. xxxiii. ſuper illud. Nō uidebit me homo & uiuet. ergo beatus Benedictus uidit deum per eſſentiam. Sed contra eſt quod dicit Iohānis ṗmo Deum nemo uidit unq̄. ubi dicit gloſa: ꝙ nullus in mortali carne uiuens: dei eſſentiā uidere pōt. ¶ Reſponſio dicendum: ꝙ corpus corruptibile aggrauat animā. ut dicitur ſapientie. ix. Summa aūt eleuatio mētis humane eſt: ut ad diuinā eſſentiā uidendā ꝑtingat unde impoſſibile ēſt ꝙ mens humana dei eſſentiam uideat. ut dicit Auguſtinus. xii. ſuper geneſim ad litterā. niſi huic uite mortali funditus homo intereat; uel ſic alienetur a ſēſibus: ut neſciat utrum ſit in corpore uel extra corpus. ſicut de Paulo legitur. ii. chor. xii. beatus autem Bn̄dictus q̄ illā uiſionē uidit: nec huic. uite funditus mortuus erat: nec a corꝑalibus ſenſibus aliēatus: qđ patet ꝑ hoc ꝙ dū adhuc in eadē uiſione ꝑſiſteret: aliū ad idē uidēdum aduocauit: ut Gregorius refert. unde manifeſtū eſt ꝙ dei eſſentiam nō uidit. Ad primum ergo dicendum: ꝙ Gregorius ex quadā ꝓportione argumentari intendit in uerbis illis. Si enim uidentes diuinam eſſentiam in eius comparatione totam creaturam reputant paruum quid ad uidendū; non eſt mirum ſi beatus

First page of Gratianus' *Decretum*. Printed by Michael Wenssler, Basel, 1481.

compensation with an agreed-upon number of copies of the editions of their works. Erasmus himself in the early part of his career as a writer depended largely upon the generosity of wealthy patrons. It was John Froben who pointed out to him that he could demand and receive pay for the writing of books. In addition to author's fees Froben paid Erasmus a liberal sum annually for his services in connection with Froben's business of printing and publishing. He lived in Froben's house as a member of the family. The cordial relationship in which the two men conducted their affairs is attested by the fact, which Kapp records, that when Froben offered Erasmus a house as a present, Erasmus declined to accept it. Erasmus was godfather to Froben's youngest son.

John Froben was born in 1460 in Hammelburg. He studied at the University of Basel, achieving distinction in Latin, Greek, and Hebrew which was to serve him in good stead in later years. He learned the art of printing in the office of John Amerbach in Basel, and set up for himself in 1491. His first work was a Bible printed in a type similar to a face designed by Aldus of Venice. His fondness for the style of printing originated by that great Italian caused him to be sometimes designated as "the German Aldus."

Froben died in 1527. Heckethorn in *The Printers of Basel* gives the number of his printed productions as 256. He printed in Latin and Greek, and with one exception his religious publications were on the side of the established church. He exercised the greatest



Psalmus LXXI

to: vt vtrunqȝ culturȩ noſtrȩ cõuenire modis omnib⁹ ſentiatur. R: Meminiſſe aũt debemus arithmeticã: vel alias diſciplinas pſalmos cõmemorare frequẽter: q̃s in ſubſequẽtibus ꝓut fuerit opoꝛtunũ de ipſis ꝯſtrictim aliq̃d cõmemorare curauim⁹: vt q̃quis breuiter dicta: nõ tñ videant̃ eſſe ꝑterita: Tm̃ eſt vt aſtrologiã ſacrilegã ſũma intẽtione fugiam⁹: quã etiã nobiliũ philoſophoꝝ iudicia dãnauerũt. Quapꝛopter ꝑſenti operi terminũ ponam⁹: quaten⁹ et quies parũꝑ adhibita lectoꝛis reparet ſtudiũ: ⁊ futura pars digeſta pſalmoꝝ de ſignificãtia noui teſtamẽti ſumat cõpetenter initium. Amen.

Explicit expoſitio in ſeptẽ Pſalmoꝛum Decades: teſtamentũ vet⁹ repꝛeſentãtes.

Incipit expoſitio in octo Decades nouo teſtamẽto cõuenientes.

Prefatio.

Explicatis ſepte decadib⁹: ſicut dictũ eſt: in figurã veteris teſtamenti: nunc ad reliquas octo veniamus: quarũ numer⁹ pleniſſime nobis reſurrectionis dñicȩ cognoſcitur indicare myſteriũ: vt his partib⁹ diligẽter inſpectis: reuera liber pſalmoꝛũ: toti⁹ ſcripturȩ diuinȩ theſaurũ cõplexus eſſe videat̃. Nã licet ſint omnia ſpũalibus plena diuitijs: ⁊ magnis illuſtrata luminib⁹: pene nullum tñ ex his vt arbitroꝛ volumẽ inuenies q̃ tantis rebus cȩleſtibus doceat̃ eſſe cõpletus. Nec moueat q̃d pars illa quã dixim⁹: ad ſacramentũ teſtamẽti veteris ꝑtinere: a beatitudine dñi ſaluatoꝛis ſumit initiũ: et iteꝝ in ſubſequẽtibus pſalmis iuenies q̃d pꝛimis ꝯſtat tẽpoꝛibus actitatũ: quȩ oĩno nõ debent aduerſa iudicari: q2 ⁊ vetus teſtamentũ de nouo plenũ eſt: ⁊ nouũ facit plerũqȝ veteris mentionẽ. Nunc ad titulũ veniam⁹: q̃ interꝑtatione nois ſui: ad noui teſtamẽti noſcit̃ ꝑtinere myſteriũ.

Titulus pſalmi ſeptuageſimipꝛimi.

Inſcribitur enim ſeptuageſimus pꝛimus pſalmus In Salomonẽ.

Rb Salomon: interꝑtat̃ pacific⁹. Quis eſt aũt reuera pacific⁹ niſi dñs chꝛiſtus: qui hominẽ diaboli verſutia deceptũ: ad creatoꝛis ſui reuocauit obſequium: fecitqȝ colere ſalutis pꝛincipẽ: qui ſeq̃batur miſerrim⁹ moꝛtis auctoꝛẽ? Ipſe eniȝ mediatoꝛ dei ⁊ hominũ hodieqȝ interpellat ꝓ nobis. Quẽ reuera dicere nos recte pacificũ: ipſius verba teſtant̃ cũ dicit: Pacem meã do vobis: pacẽ meã relinquo vobis. Joh. 14 Sed pax iſta: nõ ẽ quã bella diſturbẽt: nõ eſt quã inq̃etudo vlla cõcutiat: ſed imꝑturbata ſemꝑ atqȝ ȩterna manẽs: nulli⁹ inimici cõtrarietate diſſoluit̃. Ipſa eſt de qua ꝓpheta dicit: Dabo vobis ſolaciũ verũ: pacem ſuꝑ pacem.

Diuiſio.

Per totũ pſalmũ ꝓpheta loquens: aduentũ ſignificat dñi ſaluatoꝛis. In vna eademqȝ ꝑſona: mõ hũanitatem ei⁹: mõ diuinitatẽ alternis partib⁹ euidenter oſtẽdens. In pꝛima parte: verba facit ad patrẽ: iudiciũ filio petẽs ad ꝑſos iudicãdos: q̃d tñ ꝑdeſtinatũ ante ſecula eſſe cognoſcat̃. Secũda: i iudicio dñi filios pauperũ dicit eſſe ſaluãdos: ⁊ hũiliãdã diaboli ſine dubitatione ſuperbiã. Nam ⁊ ipſum quoqȝ virginis partũ: ꝑ quaſdã ſimilitudines mirabiliter cognoſcat̃ indicare. Tertia parte: refert quȩ bona cõtigerit de ſpiritu ſancto: ⁊ maria virgine nato dño chꝛiſto. Quarta: ab omnib⁹ regib⁹ dicit adoꝛãdũ: q2 humanũ genus a diaboli poteſtate liberauit. Quinta ꝓnũciat: q̃m hũanis oculis viſus firmamentũ fuit credentiũ: ⁊ ꝓuect⁹ ſine dubitatiõe iuſtoꝝ. Sexta: ȩterno domino totius mũdi cõſenſu laudes ꝑhibet eſſe ſoluẽdas. Septima: hymnũ dño chꝛiſto iocũdiſſima deuotione ꝑſoluit. Sic noui teſtamenti clarũ manifeſtũqȝ initiũ per huius pſalmi ſeriẽ cõſtat expꝛeſſum.

Expoſitio pſalmi.

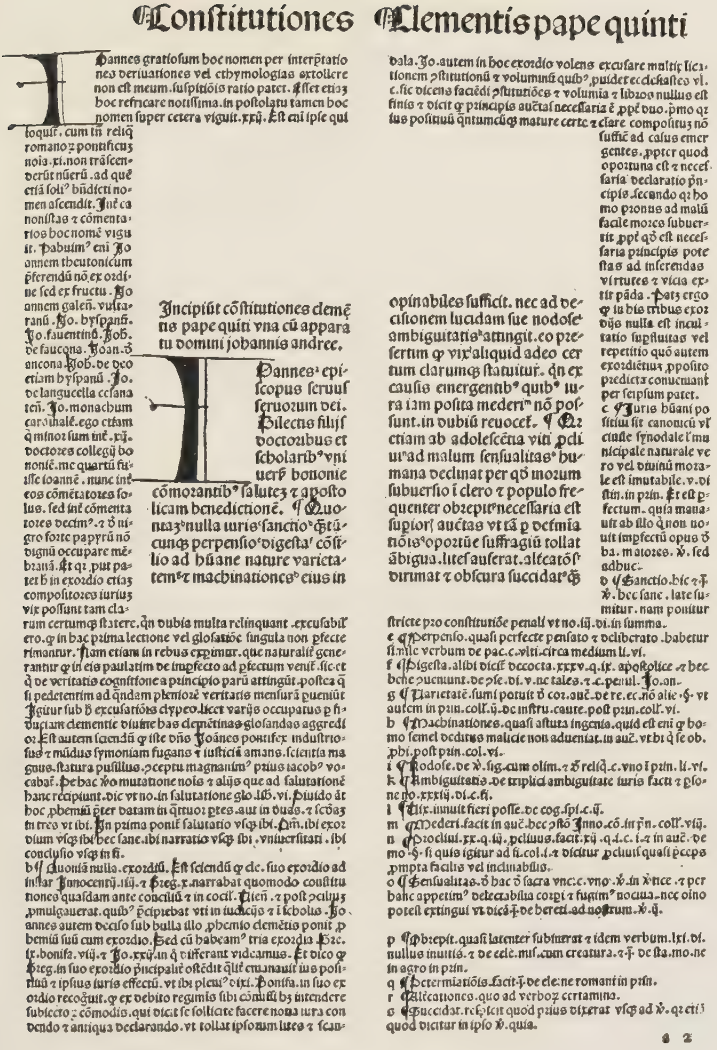
Deus iudicium tuũ regi da: ⁊ iuſticiam tuam filio regis. Cũ dicit̃: Deus: nõ videtur hoc nomẽ aliquã deſignaſſe ꝑſonã. Sed quoniam ſequit̃: Da filio: certiſſime pater inuocat⁹ ẽe cognoſcit̃. Iſtud eñ nomẽ relatiuũ eſt: ⁊ hoc quod nõ dicit indicat: ſicut ſerui appellatione ſentit̃ ⁊ dominus. Scire aũt debem⁹ ad diſtinguendas declarandaſqȝ ꝑſonas ſanctȩ trinitatis: ſola hȩc noĩa poſſe ſufficẽ. Nã cũ dixeris: De⁹ pater: deus fili⁹: deus ſpũſſctũs:

Page from *Expositio in Psalterium.* Printed by John Amerbach, Basel, 1491.

care in his work, and his reputation as a capable printer extended throughout Europe.

To Froben is to be credited the discovery of Hans Holbein, who, it is said, went to Basel in 1515 with the intention of making his living as a wood-engraver. Froben gave Holbein employment, and many of the illustrations in the books printed by Froben between 1518 and 1522 were drawn by the man who was later to become one of the greatest of German painters. Holbein's residence in England through most of his lifetime was the result of his acquaintance with Froben and Erasmus. Erasmus secured the interest of Sir Thomas More that resulted in the grant of a pension to Holbein by King Henry VIII.

Froben's interesting printer's device is a pair of hands supporting an upright rod on which rests an apparently frightened dove. The agitated attitude of the dove would seem to be justified by the proximity of the heads of two serpents whose bodies are twined around the rod. Of the device Putnam says: "It is not difficult to imagine the kind of interpretation that would be given by the wits of a modern authors' society to such a symbol, with its suggestion of the innocent and hapless author lifting his aspirations toward the heavens, but powerless to escape the toils of the wily publishers of the earth, earthy." The device seems, however, to have been accepted with nothing but seriousness in Froben's time. It carried the symbolism of the wisdom of serpents and the innocence of the dove.



¶ Constitutiones ¶ Clementis pape quinti

Incipiũt cõstitutiones clemẽtis pape quĩti vna cũ apparatu domini johannis andree.

Iohannes[a] episcopus seruus seruorum dei. Dilectis filijs doctoribus et scholarib⁹ vniuersis bononie cõmorantib⁹ salutem ⁊ apostolicam benedictionẽ. ¶ Quoniam[b] nulla iuris[c] sanctio[d] quantũcunque perpensio[e] digesta[f] cõsilio ad hũane nature varietatem[g] ⁊ machinationes[h] eius inopinabiles sufficit. nec ad decisionem lucidam sue nodose[i] ambiguitatis[k] attingit. eo presertim ꝙ vix[l] aliquid adeo certum clarumque statuitur. quin ex causis emergentib⁹ quib⁹ iura iam posita mederi[m] nõ possunt. in dubiũ reuocet. ¶ Ac etiam ab adolescẽtia viri ꝓcliui⁹[n] ad malum sensualitas[o] humana declinat per qđ morum subuersio ĩ clero ⁊ populo frequenter obrepit[p] necessaria est superioris auctoritas vt tã ꝑ determinationis[q] oportunẽ suffragiũ tollat ãbigua. lites auferat. altercatões[r] dirimat ⁊ obscura succidat[s] quia

First page of *Constitutiones Clementinae*. Printed by Nicolaus Kesler, Basel, undated (1489).

John Froben was succeeded by his son Hieronymus, who was born in 1501 and who enjoyed the distinction of being the first child born in Basel after that city became a member of the Swiss Confederation. As the chronicler of the time puts it, he "was baptized to the sound of drums and fifes." In coöperation with other members of the family, Hieronymus continued for many years to conduct the business established by his father. His death occurred in 1563.

Erasmus left Basel for a time, but later returned and remained there in more or less close association with the Froben establishment until his death in 1536 at seventy years of age.

To Berthold Ruppel (or Rodt) of Hanau is usually given credit for the introduction of printing into Switzerland, and the date was probably 1472. According to the court records of the lawsuit brought by Gutenberg against Fust, Ruppel was a workman in Gutenberg's shop. He is credited with sixteen books, none of them with a date.

There were other early printers of ability in Basel. Among them was John Amerbach, already mentioned as the instructor of John Froben. Amerbach was a native of Reutlingen, where he was born in 1434. He studied in Paris, winning the degree of master of arts, and afterwards was employed as press corrector in the office of Anthony Koberger at Nuremberg. Amerbach established a Press of his own in Basel in 1467, his first production being a Latin dictionary. He was the first printer of Basel to use a Roman type face.

Amerbach was zealous in the cause of religion, and his great ambition was to publish an edition of the works of St. Jerome. To accomplish this task required a knowledge of Latin, Greek, and Hebrew which he did not possess and which he felt too old to attempt to acquire. He therefore required his three sons, Bruno, Basilius, and Bonifacius, each to become master of one of the three languages and to devote themselves to the production of the great work. It was an arduous and costly undertaking, but Amerbach's devotion to it never failed. Erasmus wrote to the Archbishop of Toledo about him: "There are so many monks in the world who at great expense are fed to go idle; there are a great many abbots with splendid revenues, who do nothing but build fine mansions, keep horses and feast—they ought to have done what the layman did, *sua sponte*, with his own means." John Amerbach died in 1514.

Michael Wenssler matriculated at the University of Basel in 1462 but is not on record as a printer before 1472. He was an able craftsman and produced a large number of books, but he was not financially successful. He later went to France.

Nicolaus Kesler, also a graduate of the University of Basel, probably learned printing from Bernard Richel who set up a printing establishment in Basel in 1472. The earliest book Kesler is known to have printed is dated 1486. He died in 1519 but is not known to have printed after 1510.

CHAPTER XII

THE EARLY PRINTERS OF FRANCE

THE inauguration of printing in France paved the way for the emancipation of the art from manuscript imitation. The printers of Germany modeled their type designs upon the manuscripts of the monastic *scriptoria*. The first printers to establish themselves permanently in Italy followed the style of the humanistic manuscripts. The first printers in France, as in Italy, were transplanted Germans, and they showed no greater originality. But there soon sprang up a new school of French printers under the able leadership of Geofroy Tory, a professor of philosophy at the College of Burgundy and a scholar and lover of the arts generally, who produced type faces and ornaments which were something of a departure from anything that had appeared before and which for beauty of design have never been surpassed. In this school were numbered Claude Garamond, who was Tory's pupil and whose influence in improving type design was, as we shall see in a later chapter, most profound, Philippe Grandjean, Jean Alexandre, and Louis Luce.

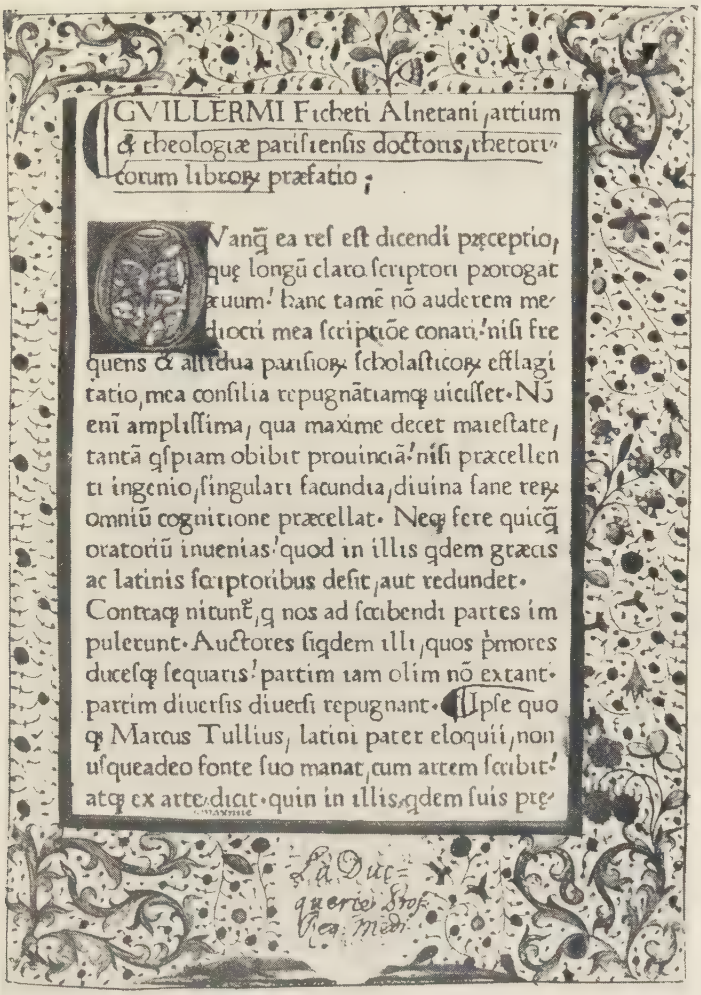
Most writers on bibliography and the history of printing accept as authentic the story of the sending by Charles VII of France of Nicolaus Jenson to Mainz in 1458 to learn the new art of printing. What is said to be the official record of the mission, dated October 3 of that year, is quoted by Bernard as follows:

> On the third day of October, 1458, the King, having learned that Messire Guthemberg, chevalier, a resident of Mentz, in Germany, a man dexterous in engraving and in types and punches, had perfected the invention of printing with types and punches. Curious concerning this mystery, the King ordered the chiefs of the mint to nominate some persons of proper experience in engraving of a similar nature so that he could secretly send them to the said place to obtain information about the said form and invention, there to hear, to consider and to learn the art. This mandate of the King was obeyed, and it was directed that Nicolaus Jenson should make the journey, by means of which the knowledge of the art and its establishment should be achieved in this realm, and it should be his [Jenson's] duty to first give the art of printing to the said realm.

Jenson, however, did not begin to print in Paris. The reason usually given for his failure to do so is that Louis XI, who ascended the French throne on the death of Charles VII in 1461, did not offer encouragement to the new art. This may have been the reason, but it is by no means certain. Louis may surely be regarded as a friend and protector of learning. He established a library in the Louvre under the care of Robert Gaguin, the General of the Order of the Holy Trinity, and spent great sums for manuscripts to add to it. It is on record that when the Paris scribes and copyists, for fear of the disastrous effect upon their fortunes of the newly discovered art of printing, instigated against the printers a vexatious legal process, Louis interfered and extended the royal favor to the harassed printers. When an agent representing Peter Schoeffer of Mainz died without leaving a legal will and his effects were seized by the Government, with the prospect of a considerable loss to Schoeffer, Louis interfered and at his own expense made restitution for the property that had been confiscated. An edict issued by him in 1513 attests his appreciation of printing, "the discovery of which," he says, "appears to be rather divine than human." He congratulates France because in the development of the new art it "takes precedence of all other realms." From all this it would seem that Louis XI was just the sort of monarch to welcome the return of Jenson to Paris with knowledge of the new art of printing.

But it is neither to Louis nor to Jenson that credit for the introduction of printing into France can be given. That honor is rightfully to be claimed for two college professors, Jean Heynlin, prior, and Guillaume Fichet, librarian, both of the Faculty of the Sorbonne, then only the theological college of the University of Paris and not as now the seat of the three faculties of literature, science, and theology.

Heynlin had come into contact with printing during an earlier connection with the University of Basel. He was the prime mover in the enterprise of bringing printing to Paris. He secured the coöperation of his fellow professor, Fichet, and the latter in his turn



¶ GVILLERMI Ficheti Alnetani/artium
& theologiæ pariſienſis doctoris/rhetori-
corum librorꝫ præfatio;

Q Vanq̄ ea reſ eſt dicendi pꝛęceptio/
quę longū claro ſcriptori pꝛorogat
æuum: hanc tamē nō auderem me-
diocri mea ſcriptiōe conari: niſi fre
quens & aſſidua pariſiorꝫ ſcholaſticorꝫ efflagi
tatio/mea conſilia repugnātiamq; uiciſſet· Nō
enī ampliſſima/ qua maxime decet maieſtate/
tantā qſpiam obibit prouinciā: niſi præcellen
ti ingenio/ſingulari facundia/diuina ſane rerꝫ
omniū cognitione præcellat· Neq; fere quicq̄
oratoriū inuenias: quod in illis qdem græcis
ac latinis ſcriptoribus deſit/aut redundet·
Contraq; nitunt̄/q nos ad ſcribendi partes im
pulerunt· Auctores ſiqdem illi/quos ꝑmores
duceſq; ſequaris: partim iam olim nō extant·
partim diuerſis diuerſi repugnant· ¶ Ipſe quo
q; Marcus Tullius/ latini pater eloquii/non
uſqueadeo fonte ſuo manat/cum artem ſcribit:
atq; ex arte dicit· quin in illis qdem ſuis pre-

La Duc=
querie Stof
Vica: Medi

First page of Fichet's *Rhetorica.* Printed by Gering, Krantz, and Freiburger, Paris, 1471.

enlisted the aid of Cardinal Jean Rolin, Bishop of Autun, and possibly other wealthy patrons. Heynlin had made the acquaintance when in Basel of a master of the Faculty of Arts named Michael Freiburger. This man and two others, Ulrich Gering and Martin Krantz, both practical printers, accepted an invitation of Heynlin and Fichet to join them in Paris and establish a Press.

Several months after their arrival were spent in the construction of equipment; a printing press and other tools had to be made and type designed and cast. The design chosen for the type was based upon the face used by Sweynheym and Pannartz in their edition of Caesar's *Commentaries*, printed at Rome in 1469. It was fairly large in size and readable if not graceful; probably it was chosen because Heynlin, who was to act as press corrector, was afflicted (so says the record) with poor eyesight. The Press was set up within the precincts of the Sorbonne, although having no official connection with it.

The first book produced by the three printers was a volume of letters by Gasparino Barzizi of Bergamo, Italy, issued in 1470. The enthusiasm with which the printers and their patrons entered into the new project is evidenced by the colophon of this first volume, which reads as follows:

> Here happily endeth the Epistles of Gasparinus. As the sun is the light, so you, oh queenly Paris, spread knowledge in the world. Therefore receive the benefits of the nearly divine art of writing, which Germany originated. Here are

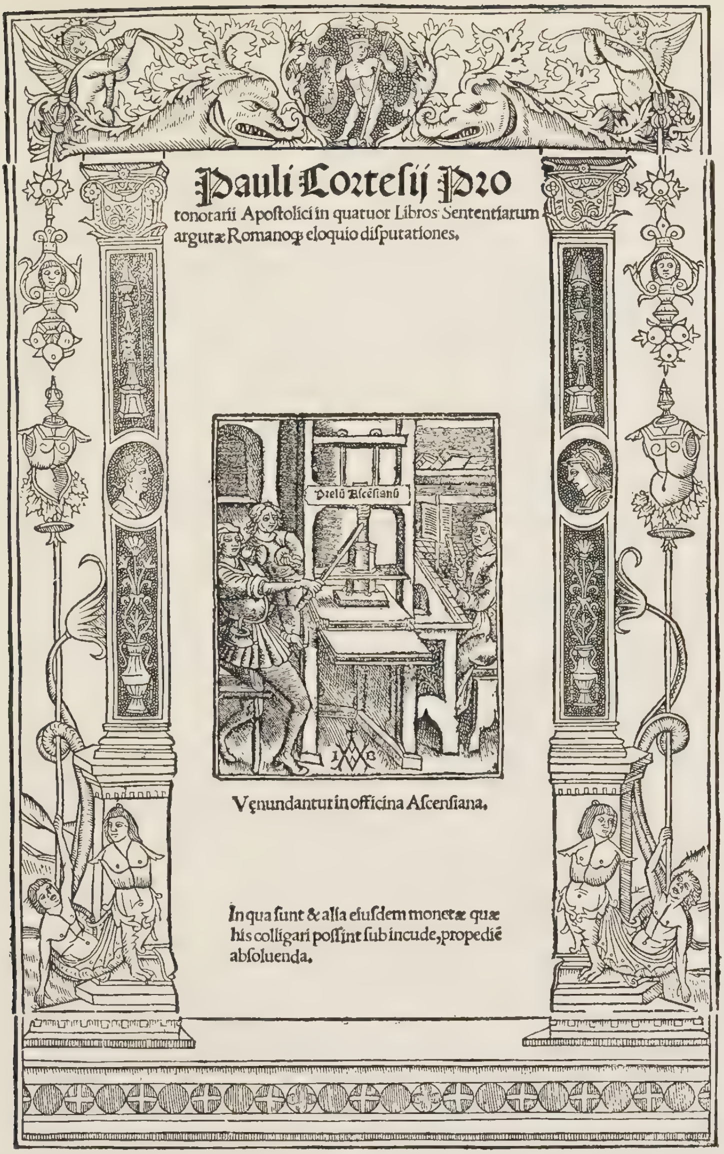
the first books which this industry produced in the land of the Francs, in your precincts. Michael, Udalricus and Martinus, masters, print them, and will produce others.

The second book, issued also in 1470, was a treatise on Latin orthography, also by Barzizi.

Freiburger, Gering, and Krantz maintained their plant within the Sorbonne precincts until 1472. They issued while at the Sorbonne, according to Claudin's list, 22 works. In their first colophon their names were given in the above order; in the second the first two names were transposed, and in later books Krantz's name preceded those of his two partners. No reason other than that of courtesy has been given for the variation in precedence.

The printing establishment was removed in 1472 to a location in the Rue St. Jacques, near the Church of St. Benoit, where for four years the three partners printed at the Sign of the Golden Sun. In 1476 they issued the first Bible printed in France. For this a new type face was cut, in design a peculiar and not unpleasing combination of rounded Gothic lower case and Roman capitals. In 1477 Gering became sole proprietor. No mention appears of Freiburger and Krantz after that date, and it is supposed that they returned to Germany.

Gering later took as partners George Mainval in 1480 and Berthold Rembolt in 1494. He continued in close association with the Sorbonne, occupying apartments in the College and a seat at the table of the doctors. He contributed to its support and remem-



Pauli Corteſij Pro
tonotarii Apoſtolici in quatuor Libros Sententiarum
argutæ Romanoq; eloquio diſputationes.

Prelū Aſcēſianū

Vęnundantur in officina Aſcenſiana.

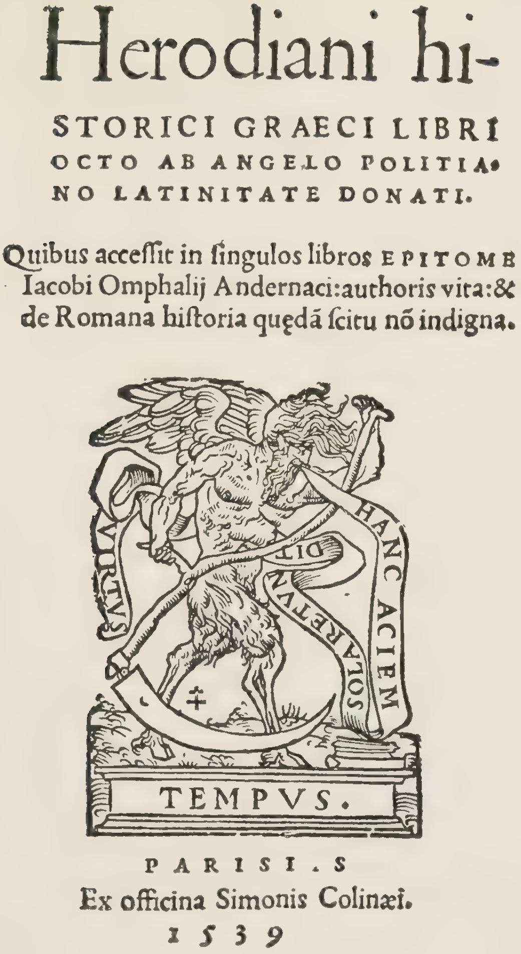
In qua ſunt & alia eiuſdem monetæ quæ
his colligari poſſint ſub incude, propediē
abſoluenda.

Title page of Cortesius' *Quattuor Librorum Sententiarum.* Printed by Jodocus Badius, Paris, 1513. Badius was the first known printer to publish a picture of the interior of a printing office. It will be noted that the typesetter holds his composing stick in his right hand. The error does not appear in a later illustration of the same scene (see page 335).

bered it substantially in his will. His death occurred in 1510.

The second Press in Paris was also established by Germans, Peter Keysere and John Stoll, who began operations in 1473. Almost contemporaneously with them came a firm of French printers composed of Louis Symonel, Richard Blandin, and Jean Simon. Little is known of either firm.

Antoine Verard, whom Duff characterizes as "the most important figure in the early history of Parisian printing," issued his first book, an edition of the *Decameron*, in 1485. Verard was more publisher than printer, a large number of the works bearing his name having been printed for him by other followers of the craft. He catered to the wealthy, one of his principal patrons being the reigning monarch, Charles VIII. Special editions, elaborately, sometimes extravagantly, illuminated, constituted his principal product during a considerable part of his long career as printer and publisher. MacFarlane credits him with 286 productions, the last being dated 1514. Verard was given to the practice, of which Anthony Koberger of Nuremberg was previously the most illustrious follower, of making engravings do multiple duty. He used the same engravings in different books to illustrate different subjects and often repeated them in a single book. An extreme instance is that of his *Merlin*, printed in 1498, in which one cut is repeated no less than twenty times. Verard died in 1530 after a prolific period of printing activity of forty-five years.



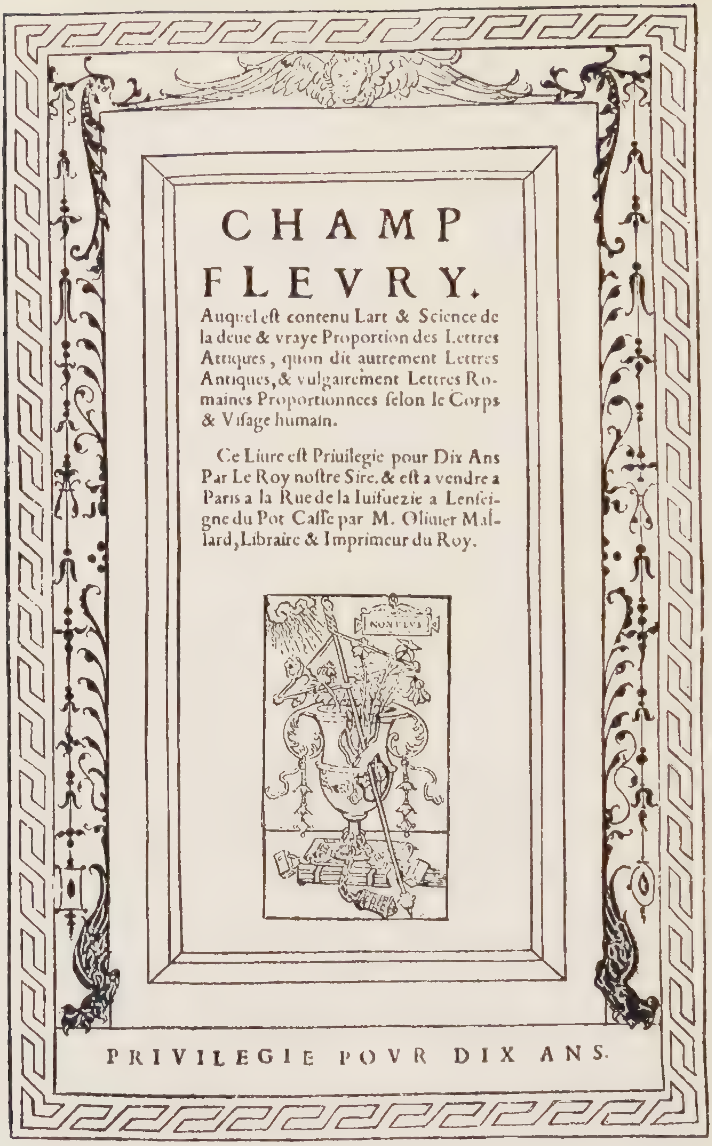
Herodiani hi-
STORICI GRAECI LIBRI
OCTO AB ANGELO POLITIA-
NO LATINITATE DONATI.

Quibus acceſſit in ſingulos libros EPITOME
Iacobi Omphalij Andernaci: authoris vita: &
de Romana hiſtoria quędā ſcitu nō indigna.

VIRTVS
HANC ACIEM SOLA RETVNDIT
TEMPVS.

PARISI.S
Ex officina Simonis Colinæi.
1539

Title page of a book printed by Simon de Colines, Paris, 1539. Device drawn by Geofroy Tory and bearing his mark, the double cross.



CHAMP FLEVRY.

Auquel eſt contenu Lart & Science de la deue & vraye Proportion des Lettres Attiques, quon dit autrement Lettres Antiques, & vulgairement Lettres Romaines Proportionnees ſelon le Corps & Viſage humain.

Ce Liure eſt Priuilegie pour Dix Ans Par Le Roy noſtre Sire. & eſt a vendre a Paris a la Rue de la Iuifuerie a Lenſeigne du Pot Caſſe par M. Oliuier Mallard, Libraire & Imprimeur du Roy.

PRIVILEGIE POVR DIX ANS.

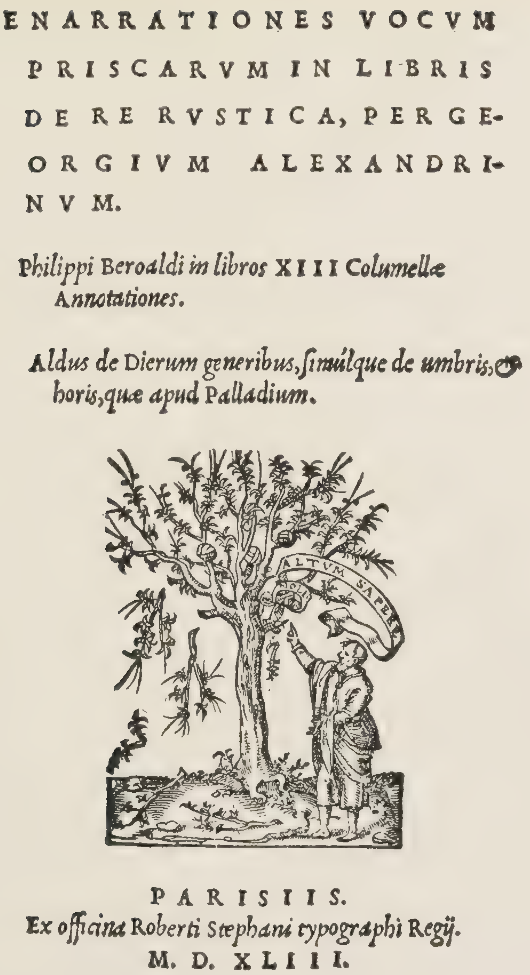
Title page of Geofroy Tory's *Champ Fleury*, written and first printed by him in 1529.

Just before the close of the fifteenth century the chief interest in French printing shifted from Paris to the southerly city of Lyons, where Guillaume Le Roy had established the first Press in 1473.

Jodocus Badius (called "Ascensius," says Greswell, because he was a native of Asc, in Flanders) takes high rank in the annals of printing. He is first heard of at Lyons, where he was employed as corrector of the press in the establishment of a well-known Lyons printer, Jean Trechsel. On the latter's death Badius married his daughter and removed to Paris. The date of the removal is not accurately known, but it was about 1500. Badius has a distinct place in printing lore because in Priscian's *Institutiones Gramatice*, a book printed by him in 1507, there appears the first published representation of a printing press that can be identified with a printer. An earlier book, printed at Lyons in 1499, contains a fanciful picture of a press, but the name of its printer is unknown. In the Badius cut, which served as the printer's device, the printer holds the composing stick in his right hand. This error was corrected in a later drawing, but the old cut was used occasionally after the new one was made. Panzer credits Badius with the production of nearly four hundred editions, most of them folios or quartos. Badius was not only a corrector of the press, but he was appointed a *libraire juré*, a bookseller who had taken an oath to follow the rules of the University. He had a brother Joannes and a son Conradus who were printers, and he was succeeded in business by his son-in-law, Jean de Roigny. His daughter became the wife of Robert Estienne.

Etienne Dolet is the only French printer to whose memory a statue has been erected. It was unveiled in Paris in 1889, in the Place Maubert, where, on August 3, 1546 (the month and day of his birth), Dolet was tortured and burned because of "blasphemy, sedition and exposing for sale prohibited and condemned books." Dolet was born at Orleans in 1508. He early engaged in religious controversy, and he was repeatedly imprisoned because of his heterodox writings. Although a religious controversialist, Dolet cannot be classed as either a Protestant or a Roman Catholic. He began writing as soon as he attained his majority and by 1536 had attracted the attention of the reigning monarch, Francis I, who gave him the privilege of printing during ten years works in Latin, Greek, Italian, and French that were the product of his own pen or had received his supervision. He issued in his short career some seventy books, of many of which he was the author.

Estienne is the name of a family of printers the members of which played an important part in French printing, publishing, and authorship during the whole of the sixteenth century. The founder of the family was Henri Estienne, who was born in Provence, date unknown. His name first appears as a printer of the University, in conjunction with that of Wolfgang Hopyll, in 1496. He set up a printing establishment in the Rue St. Jean de Beauvais, which he continued to


ALTVM SAPERE
NOLI

ENARRATIONES VOCVM
PRISCARVM IN LIBRIS
DE RE RVSTICA, PER GEORGIVM ALEXANDRINVM.

Philippi Beroaldi *in libros* XIII Columellæ
Annotationes.

Aldus de Dierum *generibus, ſimúlque de umbris, &*
horis, quæ apud Palladium.

PARISIIS.
Ex *officina* Roberti Stephani *typographi* Regij.
M. D. XLIII.

A Robert Stephens title page, Paris, 1543.

conduct until his death in 1520. His son Robert, who eventually became his father's successor, was then but seventeen years of age, and the management of the establishment devolved upon the foreman, Simon de Colines, who a year after the death of Henri Estienne married his widow.

Colines made a name for himself in the annals of French printing. He helped to establish some of the reforms instituted by Aldus in Italy: Gothic types were discarded and handy volumes replaced the cumbersome folios. Colines was one of the first French printers to set a book entirely in Italic. He is credited with no less than five hundred different editions.

Robert Estienne continued in association with the establishment and played so important a part in its affairs that when a Latin edition of the New Testament was produced in 1523, he received the censure of the clergy because of the alterations that he introduced into the text. In 1526 he became head of the establishment, adopting as his device the olive-tree design bearing the motto, *Noli altum sapere.* Three years later occurred his marriage with the daughter of Jodocus Badius. In 1539 he was appointed King's Printer for Hebrew and Latin, and a year later he became King's Printer for Greek.

Robert Estienne is most widely known because of his ecclesiastical publications, notably his editions of the Bible and especially of the New Testament. Of the whole Bible he printed eleven editions—eight in Latin, two in Hebrew, and one in French, while of the New Testament alone he printed twelve, five in Greek, five in Latin, and two in French. He early joined the Reformed Church and took an active part in religious controversy. In 1551 he removed to the more congenial atmosphere of Geneva, where he became a partisan of Calvin and where he died in 1559.

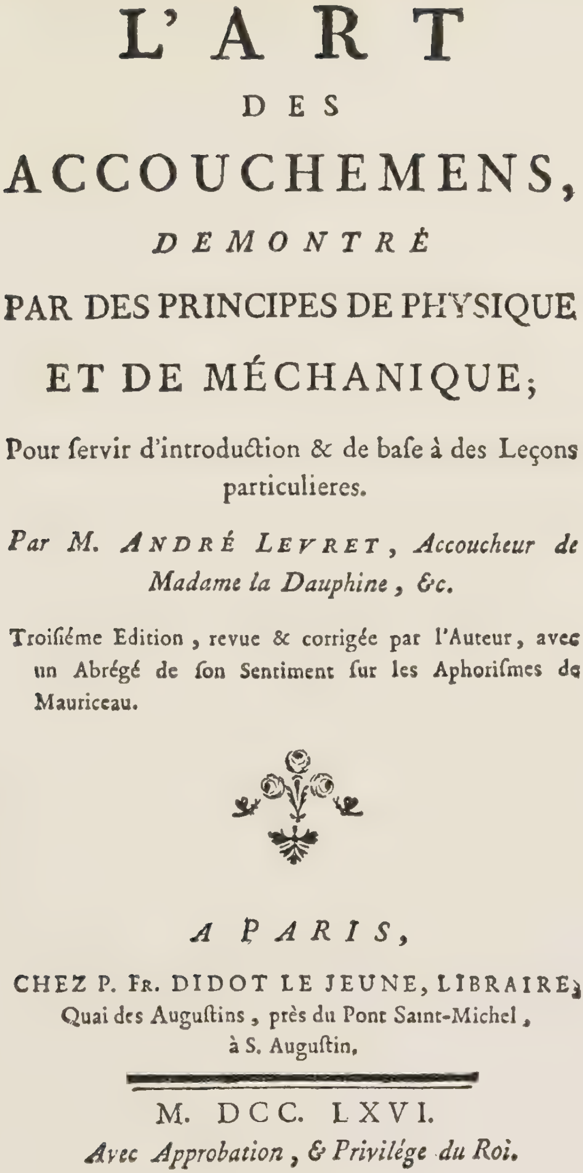
Charles Estienne, third son of Henri and brother of Robert, came into control of the Estienne printing establishment when Robert left Paris for Geneva. Charles was also a writer, but unlike Robert he remained a Catholic. He became a bankrupt in 1561 and died in a debtors' prison in 1564. Robert said of him: "He possessed the opposite attributes of being the best printer and having the worst temper of the family."

Henri Estienne, grandson of the first Henri (he was sometimes called Henri II) and eldest son of Robert, was probably the family's most learned member. He was born in 1531. After several years of travel throughout Europe as a youth, he joined his father at Geneva in 1551 and associated himself with the Estienne printing establishment there, later becoming connected with a similar enterprise in Paris. He died at Lyons, on his way to Paris, in 1598.

Geofroy Tory, with mention of whom this chapter began, was a celebrated French printer who was also a skilled designer and a writer of note. In some ways he is one of the most interesting characters in printing history—poet, artist, and dreamer, on the one hand,

and teacher, critic, craftsman, and reformer, on the other. Tory was a native of Bourges, where he was born about 1480. He is best known by a work of his own composition entitled *Champ Fleury*, the first edition of which appeared in 1529. The book dealt with the form of the letters of the alphabet and the use of the French language. Tory was appointed King's Printer by Francis I in 1530, the year in which he probably (the exact date is unknown) set up his own printing establishment. He was the first to bear the title, and as a further mark of royal favor he was made a *libraire juré*. Tory died in 1533. In his epitaph, written a century and a half after his death, he is described as a "very expert printer" and "the first man to discuss seriously the art of printing." *Champ Fleury* is still one of the most important books on the subject of the forms of letters.

Other French printers and publishers of distinction during the closing years of the fifteenth century and the opening of the sixteenth were: Jean Dupré, whom Pollard terms "perhaps the finest French printer of the century," Philippe Pigouchet, Michel Vascosan, Jean Le Royer, Jean de Tournes, Conradus Steobarius, Simon Vostre, Guy Marchant, Jean Petit, Thielmann Kerver, François and Pierre Regnault, Franciscus and Sebastianus Gryphius, and Christianus Wechel. The number of Parisian printers increased rapidly. Nearly eight hundred editions were issued in the French capital by some ninety printers between 1470 and 1500.



L'ART
DES
ACCOUCHEMENS,
DEMONTRÉ
PAR DES PRINCIPES DE PHYSIQUE ET DE MÉCHANIQUE;

Pour ſervir d'introduction & de baſe à des Leçons particulieres.

Par M. ANDRÉ LEVRET, *Accoucheur de Madame la Dauphine, &c.*

Troiſiéme Edition, revue & corrigée par l'Auteur, avec un Abrégé de ſon Sentiment ſur les Aphoriſmes de Mauriceau.

A PARIS,
CHEZ P. FR. DIDOT LE JEUNE, LIBRAIRE,
Quai des Auguſtins, près du Pont Saint-Michel,
à S. Auguſtin.

M. DCC. LXVI.
Avec Approbation, & Privilége du Roi.

A Didot title page, Paris, 1766.

Didot is another name celebrated in the annals of French printing, publishing, and authorship. The duration of the activities of the Didot family was even greater than that of the Estiennes, covering practically all of the seventeenth and three-fourths of the eighteenth century.

François Didot, born at Paris in 1689, founded the family. He began in the business of bookselling in 1713, later adding a Press. One of the most notable of his products was a twenty-volume edition of the travels of Abbé Prévost, profusely illustrated with engravings and maps and characterized by remarkable typographical excellence.

François Didot had two sons, one of whom was named François Ambroise (1730–1804). This son also had two sons, Pierre (1761–1853) and Firmin (1764–1836). The elder François' other son, Pierre François (1732–1793), had a son Henri (1765–1852) and another known as Didot *le Jeune*. They were not only printers, but type-founders and paper-makers as well. Pierre François Didot was also a paper-maker.

Pierre Didot, the eldest son of Francois Ambroise, devoted himself principally to printing and publishing, achieving a pronounced success. His edition of Racine, in three volumes folio, has been said to be "the most perfect typographical production of all ages."

Ambroise Firmin Didot, son of Firmin, is said to have been the family's most learned member. After several years of study and travel, on the retirement of his father in 1827, he assumed charge of the printing and publishing establishment in conjunction with his brother Hyacinthe. Their greatest undertaking was a new edition in nine volumes of Henri Estienne's *Thesaurus of the Greek Language*. He wrote extensively on the subject of printing and publishing, among his writings being a learned treatise on Aldus Manutius. His collection of manuscripts was said to be at the time of his death the richest in France.

CHAPTER XIII

EARLY PRINTING IN SPAIN

WHEN printing became established in Spain, the art for the first time took upon itself a national character; it became thoroughly identified with a country of its adoption. German printing did not express Germany, nor Italian printing Italy, nor French printing France, to the same degree that Spanish printing soon began to represent Spain. This is not true, of course, of every specimen of the work of the first printers in Spain, but it is true of the printing produced shortly after the introduction of the art, and the condition prevailed for a long period of time. As Haebler says, "it is a rare thing to find a Spanish book one would suppose to have been printed anywhere else."

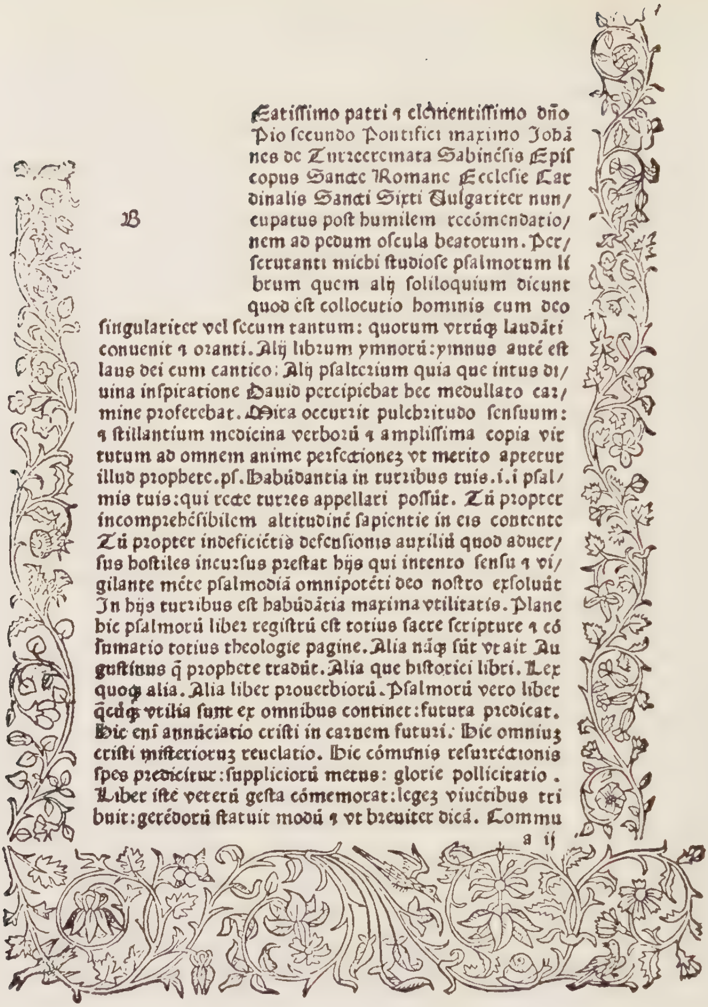
This high individuality is especially remarkable in view of the fact that the first printers in Spain, as almost everywhere else, were Germans; most of them, however, had gone to Spain after a brief sojourn in Italy. Updike suggests an explanation when he says that printing was "governed by the subtle influences emanating from the soil and skies of Spain itself—the ethos of a country to the last degree individual, which therefore showed itself very markedly even in work which would not appear capable of such impregnation. Many of these German printers married

Spanish women, and in a generation became completely merged in the land of their adoption."

The complete story of the introduction of printing into Spain is yet to be written. Spanish incunabula are not common, and what are available have not been extensively described. Haebler says that printing was practiced in Spain in the fifteenth century in 25 places, in fifteen of which the printers were Germans. German and Spanish printers together numbered 47 persons, who in migrating from place to place and operating variously as individuals and in partnerships established 60 different presses. Haebler registers 446 fifteenth-century books, 299 of which can be definitely attributed to foreigners and 64 to Spaniards, the remainder being unidentifiable. He classifies them by subjects as follows: theological, 217; novels and poems, 60; law and jurisprudence, 45; philosophical, 33; historical, 33; grammar, 29; medicine, 15; the remainder pertaining to music, geography, astronomy, mathematics, and heraldry.

The first book printed in Spain to bear a date, a place of publication, and name of printer is entitled *Pro Condendis Orationibus Juxta Grammaticas Leges* and bears the date 1468. John Gherling was the printer, and the city of Barcelona was named as the place of origin. The only copy known to exist was discovered in 1833, and the distinction gave much satisfaction to the citizens of Barcelona.

The date, however, is said by experts to be an error. John Gherling is known to have printed at two other



B

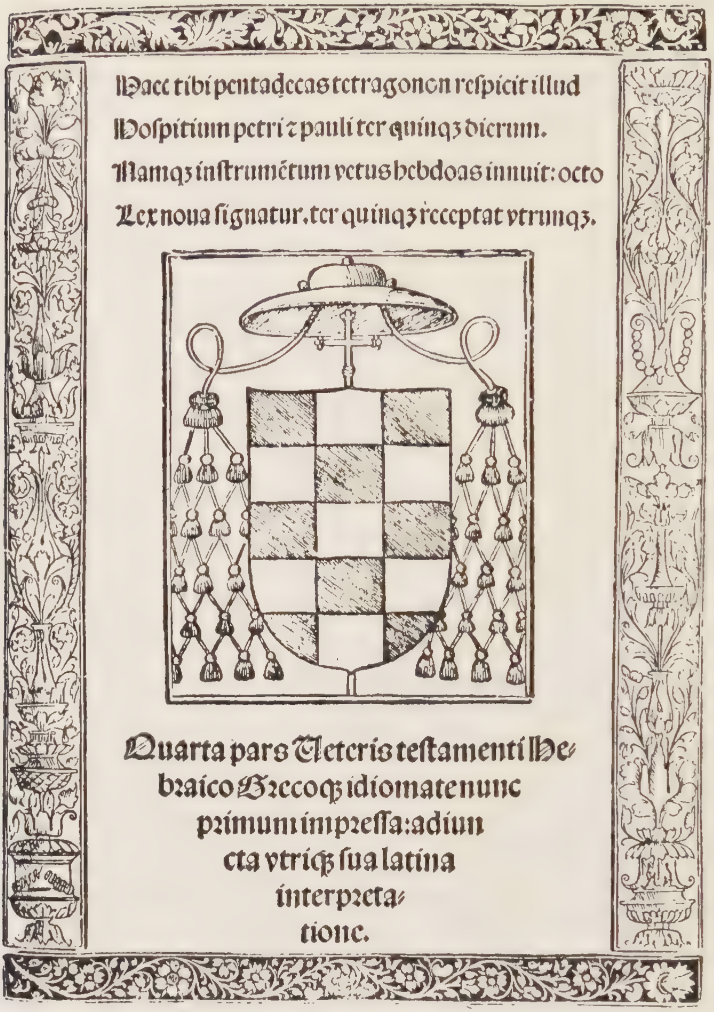
Eatiſſimo patri ⁊ cleͫntiſſimo dn̄o
Pio ſecundo Pontifici maximo Johā
nes de Turrecremata Sabinēſis Epiſ
copus Sancte Romane Eccleſie Car
dinalis Sancti Sixti Uulgariter nun/
cupatus poſt humilem recōmendatio/
nem ad pedum oſcula beatorum. Per/
ſcrutanti michi ſtudioſe pſalmorum li
brum quem alij ſoliloquium dicunt
quod ēſt collocutio hominis cum deo
ſingulariter vel ſecum tantum: quorum vtrūꝙ laudāti
conuenit ⁊ oranti. Alij librum ymnorū: ymnus autē eſt
laus dei cum cantico: Alij pſalterium quia que intus di/
uina inſpiratione Dauid percipiebat hec medullato car/
mine proferebat. Mira occurrit pulchritudo ſenſuum:
⁊ ſtillantium medicina verborū ⁊ ampliſſima copia vir
tutum ad omnem anime perfectioneꝫ vt merito aptetur
illud prophete. pſ. Habūdantia in turribus tuis. i. i pſal/
mis tuis: qui recte turres appellari poſſūt. Tū propter
incomprehēſibilem altitudinē ſapientie in eis contente
Tū propter indeficiētis defenſionis auxiliū quod aduer/
ſus hoſtiles incurſus preſtat hijs qui intento ſenſu ⁊ vi/
gilante mēte pſalmodiā omnipotēti deo noſtro exſoluūt
In hijs turribus eſt habūdātia maxima vtilitatis. Plane
hic pſalmorū liber regiſtrū eſt totius ſacre ſcripture ⁊ cō
ſūmatio totius theologie pagine. Alia nāꝙ ſūt vt ait Au
guſtinus q̄ prophete tradūt. Alia que hiſtorici libri. Lex
quoꝙ alia. Alia liber prouerbiorū. Pſalmorū vero liber
q̄cūꝙ vtilia ſunt ex omnibus continet: futura predicat.
Hic enī annūciatio criſti in carnem futuri. Hic omniuꝫ
criſti miſteriorūꝫ reuelatio. Hic cōmunis reſurrectionis
ſpes predicitur: ſuppliciorū metus: glorie pollicitatio.
Liber iſte veterū geſta cōmemorat: legeꝫ viuētibus tri
buit: gerēdorū ſtatuit modū ⁊ vt breuiter dicā. Commu
a ij

First page of an early Spanish book, showing decorative border and small initial letter intended as a guide to the rubricator.

places, Braga in 1494 and Monterey in 1496. Since nothing is known of him prior to 1494, it seems improbable that he was printing in Spain as early as 1468, particularly as printing at that time had not been practiced at any other places outside of Germany except Subiaco and Rome.

Lambert Palmart is the name of the first printer definitely known to have printed in Spain. The place was Valencia, the headquarters for foreign commerce during the latter half of the fifteenth century, and the date of Palmart's first known book, Johannes' *Comprehensorium*, was 1475. He printed five books with Roman type between that date and 1482, after which he used Gothic types. Part of the time he was in partnership with Alonso Fernandez de Cordoba, who Duff says was probably not a printer and who is certainly known to have been a celebrated astronomer; they printed, however, only one book, a Bible, together. Fifteen books are ascribed to Palmart. The first in which he included his name as printer was dated 1477, and he is supposed to have died in 1490. According to Haebler, "he assumed the title of 'master' in his first productions only; in the later ones, on the contrary, he called himself 'humble printer' (*humil empremtador*), though there is among them the first edition of the Laws of Valencia, a considerable work."

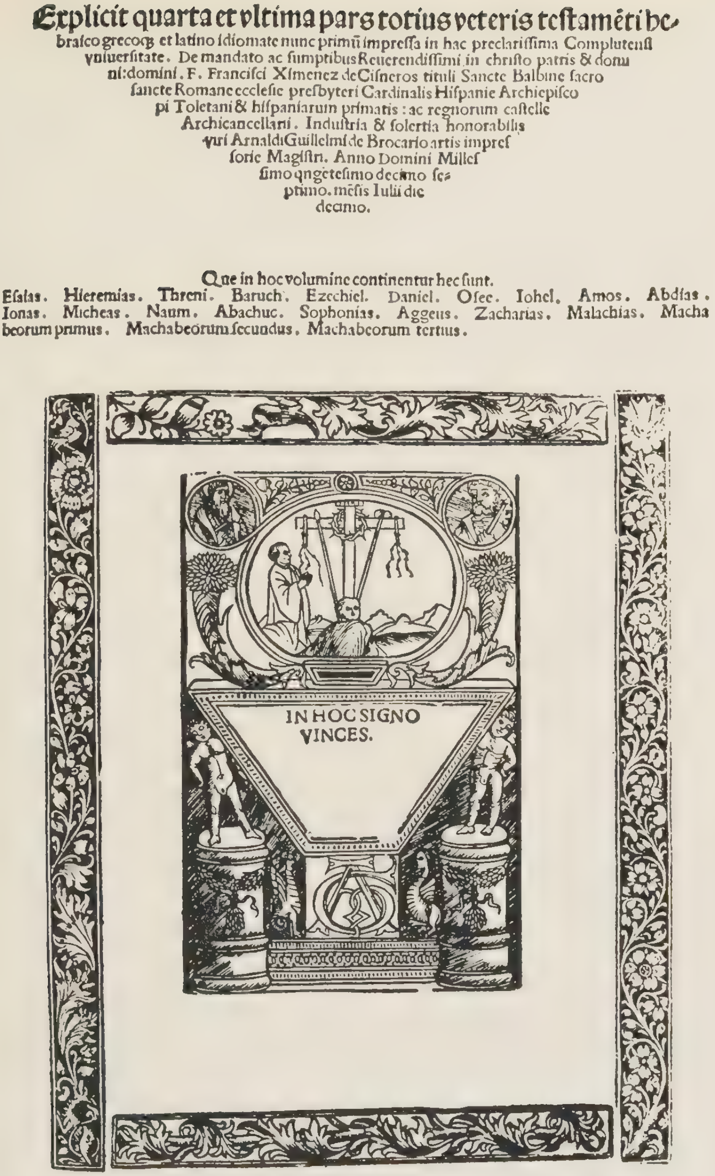
The interior town of Saragossa was the second Spanish city to receive a Press. In 1475 there appeared in Saragossa a work entitled *Manipulus Curatorum*



Haec tibi pentadecas tetragonon reſpicit illud
Hoſpitium petri ꝛ pauli ter quinqꝫ dierum.
Namqꝫ inſtrumētum vetus hebdoas innuit: octo
Lex noua ſignatur, ter quinqꝫ receptat vtrunqꝫ.

Quarta pars Veteris teſtamenti Hebꝛaico Grecoqꝫ idiomate nunc pꝛimum impꝛeſſa: adiuncta vtriqꝫ ſua latina interpꝛetatione.

First page of Volume I of the Complutensian Polyglot Bible. Printed by Arnaldo Guillén de Brocar, Alcala, 1514–17. A characteristic Spanish title page.



Explicit quarta et vltima pars totius veteris teſtamẽti he-
braico grecoqꝫ et latino idiomate nunc primũ impreſſa in hac preclariſſima Complutenſi
vniuerſitate. De mandato ac ſumptibus Reuerendiſſimi in chriſto patris & domi
ni: domini. F. Franciſci Ximenez de Ciſneros tituli Sancte Balbine ſacro
ſancte Romane eccleſie preſbyteri Cardinalis Hiſpanie Archiepiſco
pi Toletani & hiſpaniarum primatis: ac regnorum caſtelle
Archicancellarii. Induſtria & ſolertia honorabilis
viri Arnaldi Guillelmi de Brocario artis impreſ
ſorie Magiſtri. Anno Domini Milleſ
ſimo qngẽteſimo decimo ſe-
ptimo. mẽſis Iulii die
decimo.

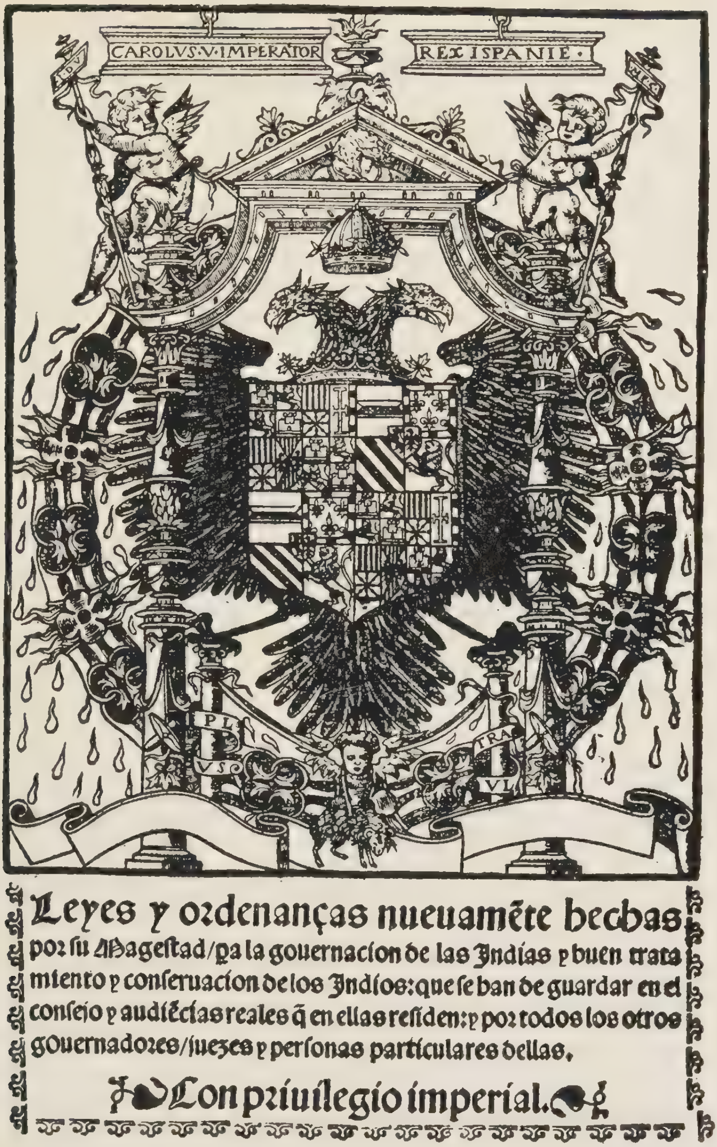
Que in hoc volumine continentur hec ſunt.
Eſaias. Hieremias. Threni. Baruch. Ezechiel. Daniel. Oſee. Iohel. Amos. Abdias. Ionas. Micheas. Naum. Abachuc. Sophonias. Aggeus. Zacharias. Malachias. Machabeorum primus. Machabeorum ſecundus. Machabeorum tertius.

Last page of Volume IV of Guillén de Brocar's Polyglot Bible. Design includes printer's mark, medallions of SS. Peter and Paul, and emblems of the Passion.

containing the name of one Matthew of Flanders as printer. This was the only appearance of the name, and nothing further is known of Matthew, but four other books printed at Saragossa between 1478 and 1482, because of their similarity to the *Manipulus Curatorum*, are attributed to him, and one other, *Visio Delectable*, printed at Barcelona in 1484, was either done by him or with types procured from him.

Seville was the third Spanish city in which printing was established, but unlike Valencia and Saragossa its printers were Spaniards. Their names were Antonio Martinez, Alonso del Puerto, and Bartolomme Segura. Where they learned the craft is not known; indeed, but little of any sort is known about them. They printed three books together, and then Martinez left the firm; the other two issued one book in 1480, and Del Puerto issued another alone in 1482.

Tortosa, a small city on the River Ebro near its mouth and about a hundred miles south of Saragossa, was selected as a location by an important firm of early printers. The firm was composed at various times of Pedro Brun, Nicolaus Spindeler, Pedro Posa, and Juan Gentel. They printed also under various partnership arrangements at Barcelona, Seville, Tarragona, and Valencia between 1477 and 1518. Pedro Posa is the best known of the members of the firm. Haebler credits him with 28 books, 21 of which were printed prior to 1500. "Posa," says he, "thus holds the first place among native Spanish printers of the fifteenth century."


CAROLVS.V.IMPERATOR
REX ISPANIE.
PLVS
VLTRA

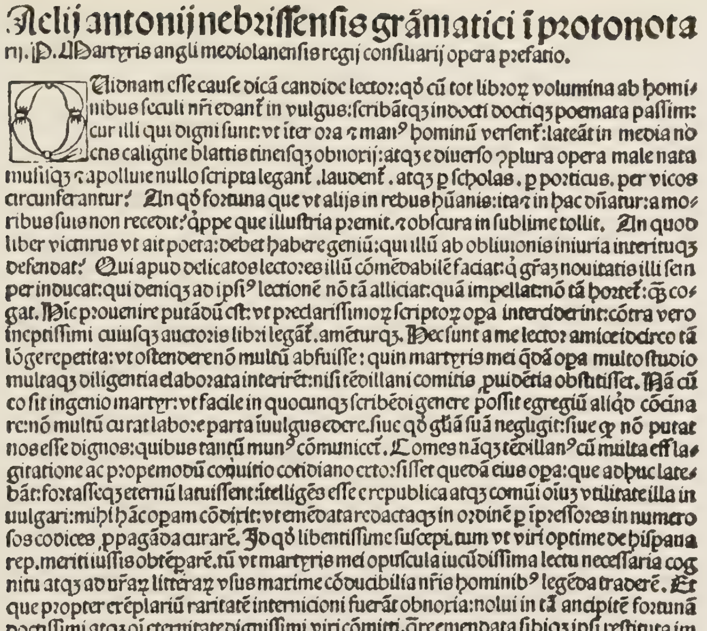
Leyes y ordenanças nueuamẽte hechas por ſu Mageſtad/ pa la gouernacion de las Indias y buen tratamiento y conſeruacion de los Indios: que ſe han de guardar en el conſejo y audiẽcias reales q̃ en ellas reſiden: y por todos los otros gouernadores/ iuezes y perſonas particulares dellas.

Con priuilegio imperial.

Title page of *Laws and Ordinances for the Government of the Indies.* Printed by Arnaldo Guillén de Brocar, Alcala, 1554.

A famous early printer in Spain was Frederick of Basel, usually known as Friedrich Biel, who began to print at Burgos in 1485. He is thought to have been in business in Basel in partnership with Michael Wenssler and to have removed from there in the year of his establishment at Burgos. His productions numbered 35. He was one of the first printers in Spain to use a printer's mark. He was both printer and publisher, the subjects of his books being religious, legal, and romantic. As a printer, says Haebler, "Friedrich Biel was a remarkable craftsman; his books are conspicuous by the beauty of the founts, the excellence of the paper, and the correctness of the impression."

Hurus was the surname of a celebrated printing and publishing family at Saragossa. The house was established in 1485 and flourished for three-quarters of a century. John Hurus was the founder; Paul was either his younger brother or his son. Theirs was the first establishment in Spain to use a printer's mark. Their books were sometimes profusely illustrated, one of them, *Officiana Quotidiana*, published in 1500, containing in addition to 50 illustrative woodcuts more than a thousand decorative initial letters. The Hurus family disappeared with the death or withdrawal of Paul in 1500. After some unimportant changes in ownership between that date and 1506, George Coci came into control and proved to be a worthy successor to the Huruses. Haebler credits Coci with 63 books and believes the list to be incomplete. Of Coci



Aelij antonij nebꝛiſſenſis grāmatici ī pꝛotonotarij. P. Martyris angli mediolanenſis regij conſiliarij opera pꝛefatio.

Quidnam eſſe cauſe dicā candide lectoꝛ: qd̔ cū tot libꝛoꝝ volumina ab hominibus ſeculi nr̄i edant̄ in vulgus: ſcribātqꝫ indocti doctiqꝫ poemata paſſim: cur illi qui digni ſunt: vt iter oꝛa ⁊ manꝰ hominū verſent̄: lateāt in media nocte caligine blattis tineiſqꝫ obnoxij: atqꝫ e diuerſo ꝯplura opera male nata muſiſqꝫ ⁊ apolline nullo ſcripta legant̄. laudent̄. atqꝫ ꝑ ſcholas. ꝑ poꝛticus. per vicos circunferantur? An qd̔ foꝛtuna que vt alijs in rebus hūanis: ita ⁊ in hac dn̄atur: a moribus ſuis non recedit? qppe que illuſtria pꝛemit. ⁊ obſcura in ſublime tollit. An quod liber victurus vt ait poeta: debet habere geniū: qui illū ab obliuionis iniuria interituqꝫ defendat? Qui apud delicatos lectoꝛes illū cōmēdabilē faciat: q̄ grāꝫ nouitatis illi ſemper inducat: qui deniqꝫ ad ipſiꝰ lectionē nō tā alliciat: quā impellat: nō tā hoꝛtet̄: q̄ȝ cogat. Hic pꝛouenire putādū eſt: vt pꝛeclariſſimoꝝ ſcriptoꝝ opa interciderint: cōtra vero ineptiſſimi cuiuſqꝫ auctoꝛis libꝛi legāt̄. amēturqꝫ. Hec ſunt a me lectoꝛ amice idcirco tā lōge repetita: vt oſtenderē nō multū abfuiſſe: quin martyris mei qdā opa multo ſtudio multaqꝫ diligentia elaboꝛata interirēt: niſi tēdillani comitis ꝓuidētia obſtitiſſet. Nā cū eo ſit ingenio martyr: vt facile in quocunqꝫ ſcribēdi genere poſſit egregiū aliqd cōcinnare: nō multū curat laboꝛe parta ī vulgus edere. ſiue qd̔ gl̄iā ſuā negligit: ſiue q̄ nō putat nos eſſe dignos: quibus tantū munꝰ cōmunicet. Comes nāqꝫ tēdillanꝰ cū multa efflagitatione ac pꝛopemodū cōuitio cotidiano extoꝛſiſſet quedā eius opa: que adhuc latebāt: foꝛtaſſeqꝫ eternū latuiſſent: itelligēs eſſe e republica atqꝫ comūi oīuꝫ vtilitate illa in vulgari: mihi hāc opam cōdixit: vt emēdata redactaqꝫ in oꝛdinē ꝑ ipꝛeſſoꝛes in numeroſos codices ꝓpagāda curarē. Id qd̔ libentiſſime ſuſcepi. tum vt viri optime de hiſpana rep. meriti iuſſis obtēꝑarē. tū vt martyris mei opuſcula iucūdiſſima lectu neceſſaria cognitu atqꝫ ad nr̄aꝝ litteraꝝ vſus maxime cōducibilia nr̄is hominibꝰ legēda traderē. Et que pꝛopter exēplariū raritatē internicioni fuerāt obnoxia: nolui in tā ancipitē foꝛtunā doctiſſimi atqꝫ oī eternitate digniſſimi viri cōmitti. q̄re emendata ſibiqꝫ ipſi reſtituta impꝛeſſoꝛū typis excudenda tradidi: vt per numeroſas chartas ꝓpagata ſint diuturnioꝛa q̄ȝ abolere poſſit vetuſtas. Dedi hoc verſibus quos ille in meā laudē cōpoſitos edidit. Dedi amicicie nr̄e multis vltro citroqꝫ officijs cōfirmate. Dedi publice vtilitati: que ex iſtoꝛū opeꝝ lectiōe cōſequet̄. Que tn̄ ea ſint opa paucis accipe. Prima frōte ſub legationis babylonice noīe tris libellos cōſpicies: quoꝝ pꝛimꝰ qd̔ ipſi ad ſoldanū babiloniū pꝛoficiſcēti legato donec venetijs mare conſcenderit: ex vꝛbe granata in itinere contigerit: multaqꝫ de venetoꝛū inſtitutis ⁊ vrbe lectu ſapida continebit.

Secūdꝰ nauigationē ipſius ab vꝛbe venetiarum in Alexādꝛiā egyptiā enarrabit.

Tertiꝰ quid apd̔ ſoldanū oꝛatoꝛ egerit: que memoꝛatu digna viderit: de ſoldani ac mamalucoꝛū oꝛigie: vita ⁊ moꝛibꝰ multiſqꝫ cuiqꝫ īgenio celeberrimo iucūdiſſimis idex erit.

Secūdā ſibi ſedē in hoc volumine decas occeanea occupabit. hec decē cōſtat libellis.

Pꝛimus quo auctoꝛe tractꝰ occeani hactenus latentes reperti fuerint: quid ve terre ille poꝛtendant: aperiet.

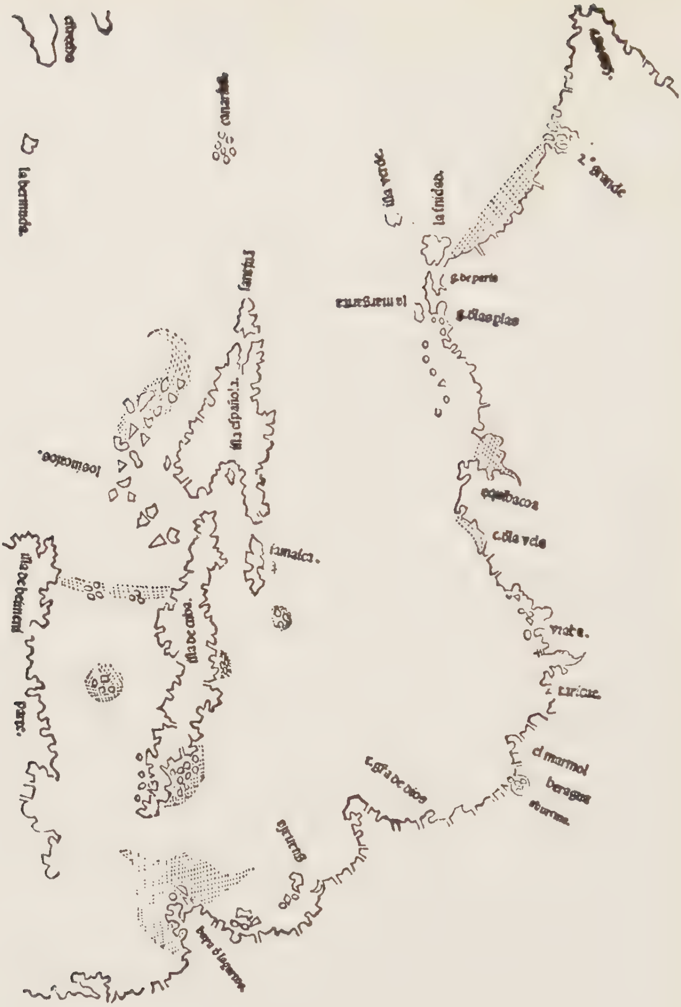
Secūdus ꝑ canibalū inſulas duo de viginti nauigia cū hiſpanis vltra mille rebuſqꝫ ⁊ opificibus ad nouā vꝛbē in abſtruſis terris cōdēdā facientibus: traſpoꝛtabit.

Tertio cube latus ingēs meridionale: adeo pꝛotētū vt cōtinens eē ſuſpicati ſint deſcribet̄

Quarto quid ex cuba redeūtes hiſpani cū ipſo colono in iſulā hiſpaniolā vbi pedē figūt effecerint: eoꝛūqꝫ regreſſuſqꝫ ad reges dicetur.

a ij

First page of first edition of Peter Martyr's works. Printed by Jacob Kromberger, Hispoli, 1511.



Map of the Greater Antilles from Peter Martyr's work. Printed by Jacob Kromberger, Hispoli, 1511. It exhibits a remarkable accuracy.

he said, as he said of Friedrich Biel: "All his productions are conspicuous by the beauty of the types, the accuracy of the printing, and the excellence of the paper." Coci's connection with the Hurus establishment ceased in 1543, which was probably the year of his death.

Arnaldo Guillén de Brocar was a wandering printer who started at Pamplona in 1489 and afterwards printed at Logroño, Alcala, and Valladolid. De Brocar was a foreigner of unknown origin. He had the honor of issuing the first of the four great polyglot Bibles, his comprising six volumes. The first volume, dated January 10, 1514, contains the New Testament in Greek and Latin. In Volumes II to V, completed in 1517, the Hebrew text of the Old Testament was printed in the first column of each page, followed by the Latin Vulgate and then by the Septuagint version with an interlinear Latin translation. Below these stood the Chaldaic, again with a Latin translation. The sixth volume bears the date 1515. The completed work failed to receive the immediate sanction of the Pope, and it was not published until 1522. The publication of the Bible was made possible by the liberality of Cardinal Ximenes, who, it is said by his biographer Gomez, spent 50,000 ducats on it.

It is interesting to note that the other early polyglot editions of the Bible, those printed by Christopher Plantin of Antwerp in eight volumes folio in 1569–1573, by Gui le Jay in Paris in 1645, and by Brian Walton in London, 1657, all were commercial enterprises on the part of their publishers and printers and all were financial failures.

John Rosenbach was another wandering printer. Going to Spain from Heidelberg, Germany, as he frequently stated in his colophons, he set up in Barcelona in 1492, being the second printer to locate there. Twenty-nine books have been ascribed to his Barcelona Press, and there were probably more. He afterwards printed at Tarragona, Perpignan, Valencia, and Montserrat. His name appears for the last time in 1530.

Probably the most illustrious name in the history of printing in the Iberian Peninsula is that of Kromberger. More nearly than any other it means to Spain what Aldus means to Italy, Froben to Switzerland, and Estienne to France. There were two Krombergers, Jacob and John, father and son. The elder Kromberger succeeded to the proprietorship of a Press established at Seville by Meinard Ungut, a German, in 1491. Ungut had previously operated at Granada in conjunction with John Pegnitzer, and at Seville also he had a partner named Stanislas, a native of Poland. After Ungut's death, about 1500, Stanislas operated the Press for two years, producing eight books. He established another Press at Alcala in 1502, and soon afterward (the exact date is unknown) turned over the management of the Seville business to Jacob Kromberger.

Not much is known of the personal history of the Krombergers. Jacob was summoned to Portugal by King Manuel in 1507 to print a collection of the laws of that kingdom, and the order of Knight of the Royal Household was conferred upon him as a reward for meritorious service. He went again to Lisbon on a similar mission and under the same auspices in 1521.

It is to John Kromberger that the credit must be awarded for introducing printing into the Western Hemisphere. In 1539 he undertook to issue a religious missionary tract printed in the Spanish and Nahuatl languages. Because of unfamiliarity with the latter, Kromberger equipped a printing outfit and sent it under the management of Giovanni Paoli, an Italian, to Mexico, where eight books were issued under the name of Kromberger, who, however, did not himself make a journey to the New World.

John Kromberger is thought to have died in 1540. Haebler registers the titles of 239 books bearing the names of the two Krombergers, about one-half consisting of polite literature and one-fourth of theology, the remainder being devoted to law, philosophy, geography, medicine, music, etc.

CHAPTER XIV

PRINTING IN THE LOW COUNTRIES

HADRIANUS JUNIUS (or Adrian Young) is the name of a Dutch historian who was responsible for what non-believers term the "Coster Legend" with regard to the invention of printing. Junius was born in 1511 and died in 1575. He left the manuscript of a work entitled *Batavia* which was published several years after his death. In it was a circumstantial account of the invention of printing from movable types by Laurens Janszoon Coster (that is, Laurence, the son of John Coster, the surname meaning "sexton" or "sacristan"), of Haarlem. The charge was made by Junius that on Coster's death in 1440 the knowledge of his invention was surreptitiously taken to Mainz by one of his workmen whose given name was John. "Whether his surname be that of Faust, or any other, is of no great importance to me," says Junius, "as I will not disturb the dead, whose consciences must have smote them sufficiently while living." Junius states that Coster's business attracted numerous customers and was profitable, employing several workmen; nevertheless, after the departure of the dishonest employee it passed out of existence. No other reference to Coster appears in Dutch history previous to the publication of *Batavia*, which occurred nearly a century and a half after the date on which Coster's death is said to have occurred. Pollard summarizes the Junius statement in his *Fine Books*, and adds: "Written nearly a hundred and thirty years after the supposed events which it narrates, this story is damned by its circumstantiality."

Katelaer and Liempt were the first Dutch printers to place their names in a printed book of their own production, the place and date being Utrecht, 1473. They used but one font of type, producing in the dozen years during which they were in partnership about a dozen books. Printing was done at Utrecht as early as 1471, but the name of the printer is unknown.

Jan Veldener was, like many others of his contemporaries, a wandering printer. He was at Louvain (1473–1477), at Utrecht (1478–1481), and at Kuilenburg (1482–1484). His first dated book was the *Belial* of Jacobus de Theramo, dated Louvain, August 7, 1474. Almost, if not quite, contemporaneous with him was John of Paderborn, usually known as John of Westphalia. Both were students at the University of Louvain, and both received from it the honorary title of Master of Printing. John of Westphalia's first book, Petrus de Crescentiis' *Liber Ruralium Commodorum*, was issued December 9, 1474. John's work was of superior quality. He continued to print until 1496, producing in all about two hundred editions. In addition to his name he printed in some of the colophons of his books a small woodcut of his portrait, thus registering the first authentic printer's portrait.

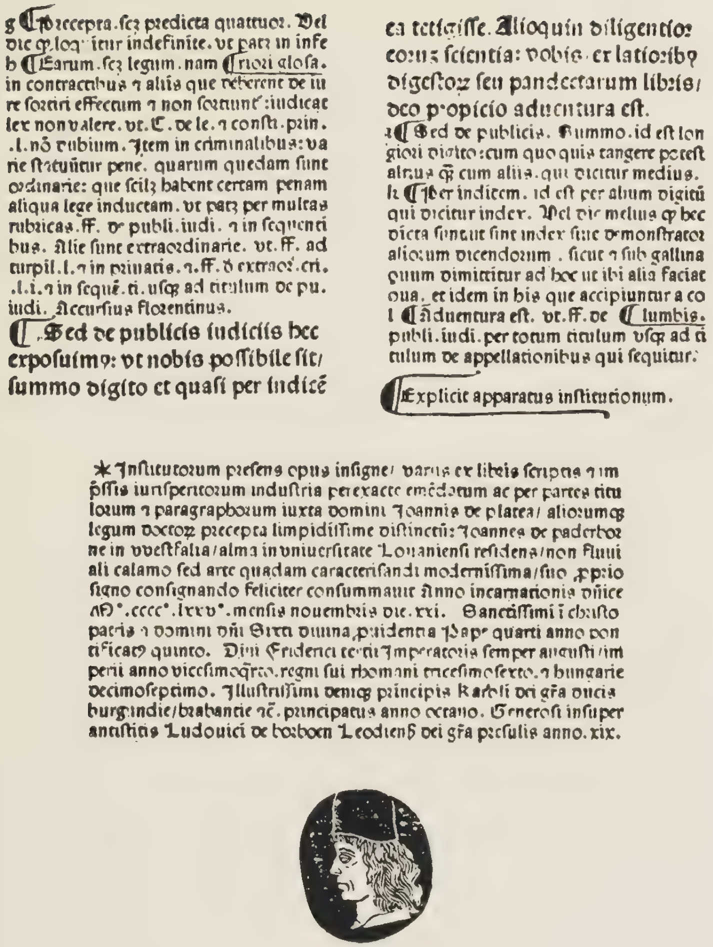
Many alleged portraits of some other early printers—Gutenberg, Fust, Schoeffer, Caxton, etc.—are in existence, but not one of them is authentic. All were made by artists who drew upon their imaginations at the same time that they drew upon paper or canvas. There is no way of knowing whether or not the subjects in any way resembled what William Shakespeare would have called their "counterfeits." With John of Westphalia, however, the case is different; since he published his own portrait, it must be accepted as being a fair resemblance. He also blind-stamped his portrait on some of his bindings.

Thierry Martens was one of the earliest of the Low-Country printers. He was in partnership with John of Westphalia at Alost in 1473 and afterwards printed at Antwerp and Louvain, in which latter place he ended his long career in 1529. In addition to being a printer he was a distinguished scholar and linguist.

Another well-known Antwerp printer was Gerard Leeu, who first set up a Press in Gouda in 1477, removing to Antwerp in 1484 and continuing to print there until 1493. He gave to the city, according to Proctor, its first distinction as a printing center.

Jacob Bellaert was the first printer in Haarlem if the claims for Coster are to be disallowed. Bellaert began in 1483 and between that date and 1487 produced fifteen books.

Jan Van Doesborgh (John of Doesborgh, a small town not far from Arnheim) is first heard of in the



g ¶ Precepta. ſcȝ predicta quattuoꝛ. Uel dic ꝙ loquitur indefinite. vt patȝ in inferioꝛi gloſa.

b ¶ Earum. ſcȝ legum. nam in contractibus ⁊ aliis que deberent de iure ſoꝛtiri effectum ⁊ non ſoꝛtiunt᷑: iudicat lex non valere. vt. C. de le. ⁊ conſti. pꝛin. .l. nō dubium. Item in criminalibus: varie ſtatuūtur pene. quarum quedam ſunt oꝛdinarie: que ſcilȝ habent certam penam aliqua lege inductam. vt patȝ per multas rubꝛicas. ff. de publi. iudi. ⁊ in ſequentibus. Alie ſunt extraoꝛdinarie. vt. ff. ad turpil. l. ⁊ in pꝛiuatis. ⁊. ff. de extraoꝛ. cri. .l. i. ⁊ in ſequē. ti. uſqȝ ad titulum de pu. iudi. Accurſius Floꝛentinus.

¶ Sed de publicis iudiciis hec expoſuimꝰ: vt nobis poſſibile ſit/ ſummo digito et quaſi per indicē ea tetigiſſe. Alioquin diligentioꝛ coꝛuȝ ſcientia: vobis ex latioꝛibꝰ digeſtoꝝ ſeu pandectarum libꝛis/ deo ꝓpicio aduentura eſt.

a ¶ Sed de publicis. Summo. id eſt longioꝛi digito: cum quo quis tangere poteſt altius ꝙ cum aliis. qui dicitur medius.

k ¶ Per indicem. id eſt per alium digitū qui dicitur index. Uel dic melius ꝙ hec dicta ſunt ut ſint index ſiue demonſtratoꝛ alioꝛum dicendoꝛum. ſicut ⁊ ſub gallina ouum dimittitur ad hoc ut ibi alia faciat oua. et idem in his que accipiuntur a columbis.

l ¶ Aduentura eſt. vt. ff. de publi. iudi. per totum titulum uſqȝ ad titulum de appellationibus qui ſequitur.

¶ Explicit apparatus inſtitutionum.

* Inſtitutoꝛum pꝛeſens opus inſigne/ variis ex libꝛis ſcriptis ⁊ impꝛeſſis iuriſperitoꝛum induſtria perexacte emēdatum ac per partes tituloꝛum ⁊ paragraphoꝛum iuxta domini Joannis de platea/ alioꝛumqȝ legum doctoꝝ pꝛecepta limpidiſſime diſtinctū: Joannes de paderboꝛne in vveſtfalia/alma in vniuerſitate Louanienſi reſidens/non fluuiali calamo ſed arte quadam caracteriſandi moderniſſima/ſuo ꝓpꝛio ſigno conſignando feliciter conſummauit Anno incarnationis dñice M°.cccc°.lxxv°. menſis nouembꝛis die. xxi. Sanctiſſimi i chꝛiſto patris ⁊ domini dñi Sixti diuina ꝓuidentia Pape quarti anno pontificatꝰ quinto. Diui Friderici tercii Imperatoris ſemper auguſti/imperii anno viceſimoqrto. regni ſui rhomani triceſimoſexto. ⁊ hungarie decimoſeptimo. Illuſtriſſimi deniqȝ pꝛincipis Karoli dei gr̄a ducis burgundie/bꝛabantie ⁊c̄. pꝛincipatus anno octauo. Generoſi inſuper antiſtitis Ludouici de boꝛbon Leodienſ dei gr̄a pꝛeſulis anno. xix.

Colophon of Justinian's *Institutiones*. Printed by John of Westphalia, Louvain, 1475. It shows the earliest known authentic portrait of a printer.

early years of the sixteenth century, when he succeeded to the business in Antwerp of Roelant Van den Dorpe, who died in 1500. Van den Dorpe's widow continued the business but seems to have printed no books after 1501. Van Doesborgh's first book, *The Fifteen Tokens*, without date, is believed to have been issued in 1505. His first dated book appeared in 1508, his last in 1530.

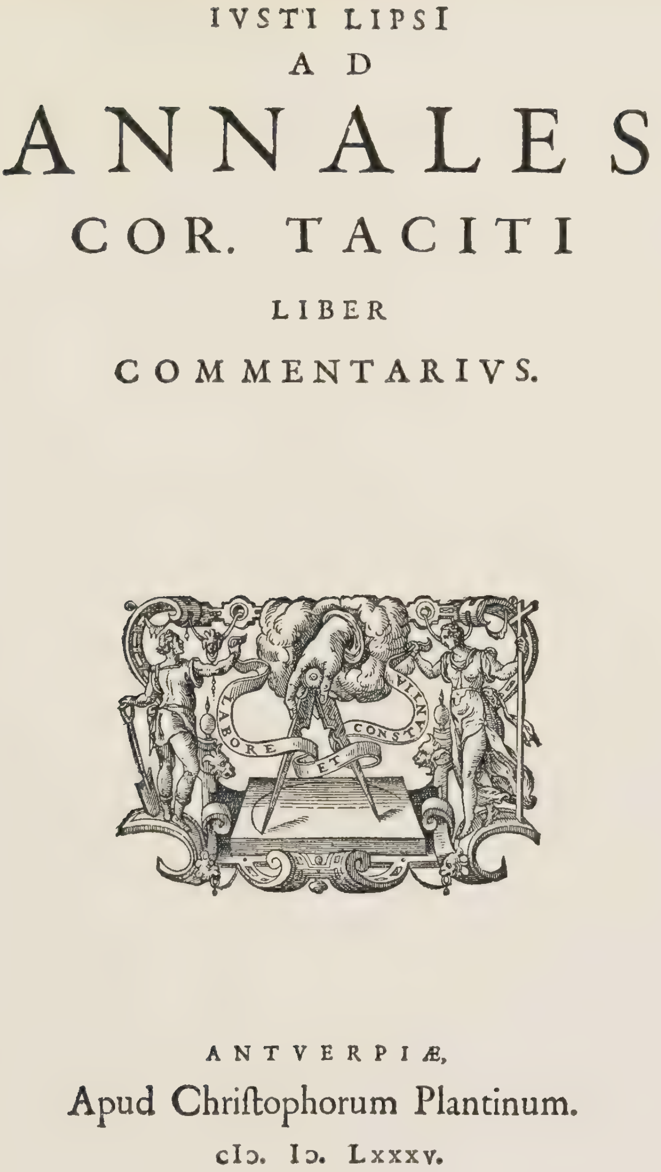
Bruges is a city of especial interest to all those whose heritage is the English language, for it was in the quaint "City of Bridges" that William Caxton chiefly served his apprenticeship in the art of printing. Colard Mansion, a writer and illuminator of manuscripts, was Caxton's preceptor at Bruges. Mansion began to print about 1475. His partnership with Caxton resulted in the production of two books, Le Fèvre's *Recuyell of the Historyes of Troye*, which was the first book printed in the English language, and *The Game and Playe of the Chesse*. A third book, *Les Quatre Derrenières Choses*, is usually attributed to Caxton but may have been printed by Mansion after Caxton had left Bruges.

A unique printing enterprise was that conducted by the Brothers of the Common Life at their monastery at Brussels. Forbidden by their vows to ask for alms or accept gifts and obliged by the same vows to live by the labor of their hands, they devoted themselves to teaching and to copying manuscripts. They maintained monasteries at various places, and at that of Cologne they are supposed to have obtained their first knowledge of printing from Ulrich Zell when that shrewd printer and publisher migrated from Mainz and set up his printing establishment in 1462. Madden suggests that the Brothers maintained a school of typography and gave instruction to Mansion, Caxton, and others, a suggestion, however, unacceptable to Blades so far as it concerns Caxton. If Madden is correct in his supposition, this was the first organized effort to teach printing. Putnam says their first Press was established at Marienthal in 1468 and that by 1490 no less than sixty different printing establishments were carried on under the Brothers' supervision.

Christopher Plantin, the best known of the Low-Country printers, was born near Tours in France. His biographers do not agree as to the date, some giving it as 1514 and others 1520. Plantin received his instruction in printing under Robert Macé, King's Printer at Caen. Thence he went to Antwerp, where he set up first as a bookbinder and later, in 1555, as a printer. Plantin's first production was a small book entitled *Institution d'une Fille de Noble Maison.* The most important of his productions was a polyglot edition of the Bible, in eight volumes, printed 1569–1573. It was issued by authority of Philip II of Spain, at that time ruler of Flanders, and was in four languages, Hebrew, Latin, Greek, and Chaldaic. Twelve hundred copies were printed, but a large part of the edition was lost through the wreck of a vessel conveying them to Spain. The Polyglot Bible proved to be financially disastrous to Plantin because the aid he had expected to receive from Philip was denied and because Pope Pius V refused to sanction the publication on the ground that any general circulation of the Scriptures might prove dangerous. Gregory XIII, successor to Pius V, reversed this attitude but the ensuing delay had strained Plantin's resources to the breaking point.

In 1569 Philip II instituted the office of prototypographer, or supervisor of printing, for the Netherlands, and Plantin was appointed to the post, taking the title of "Printer to the King."

By 1576 Plantin's office had grown to an establishment including 25 presses and employing 150 workmen, but through the ravages of the revolt of the Netherlands from Spain it dwindled until only one press was in operation. The return of peace again brought prosperity to Plantin; in 1579, for instance, he sent more than five thousand volumes to the fair at Frankfort and was selling books in large quantities through branches and agents in various cities. But by 1583 reverses had come again, and in that year Plantin gave up his business in the half-ruined city of Antwerp and went to Leyden, where he joined Louis Elzevir in the printing establishment which the latter had set up there three years before. The following year Plantin was appointed Printer to the University, but after holding the title and enjoying the emolument of 200 florins which it carried for one year, he transferred it and his interest in the Leyden establishment to his son-in-law, Franciscus Raphelengius, and



IVSTI LIPSI
AD
ANNALES
COR. TACITI
LIBER
COMMENTARIVS.

LABORE ET CONSTANTIA

ANTVERPIÆ,
Apud Chriſtophorum Plantinum.
cIↄ. Iↄ. Lxxxv.

A Plantin title page, Antwerp, 1585.

returned to Antwerp. Plantin died in 1589 and was buried in the great cathedral in Antwerp, where a memorial bears testimony to the esteem in which he was held as a man and as a printer-publisher.

Plantin is said to have been able to read, write, and speak French, Spanish, German, Flemish, and Latin and to have had some knowledge of Italian and English. He did not, however, make use of his linguistic ability to any extent along literary lines; he was not a writer or editor in the sense that Froben, Aldus, and the Estiennes were writers and editors. He was the friend and patron of the noted artists of his time, among them Rubens, who contributed materially to the quality of Plantin's productions and many of whose paintings and drawings still adorn the home of his Press.

Although Plantin printed both at Leyden and at Antwerp, it is with the latter city that his name will always be linked as one of the greatest printers. One writer, Scribanius, said of him: "Many illustrious men have flourished as printers . . . but these are all eclipsed in the single name of Plantin. If they were the stars of their own hemispheres, you, Plantin, are the Sun, not of Antwerp, nor of Belgium only, but of the world." Putnam, however, does not rate him quite so high: "Plantin was in typography an artist and a liberal artist. . . . While he cannot take rank with Aldus as a great man, he may fairly be described as a great publisher. He possessed imagination, courage, high ideals, and public spirit, and he showed himself not infrequently more ambitious to do important work for literature than to amass wealth."

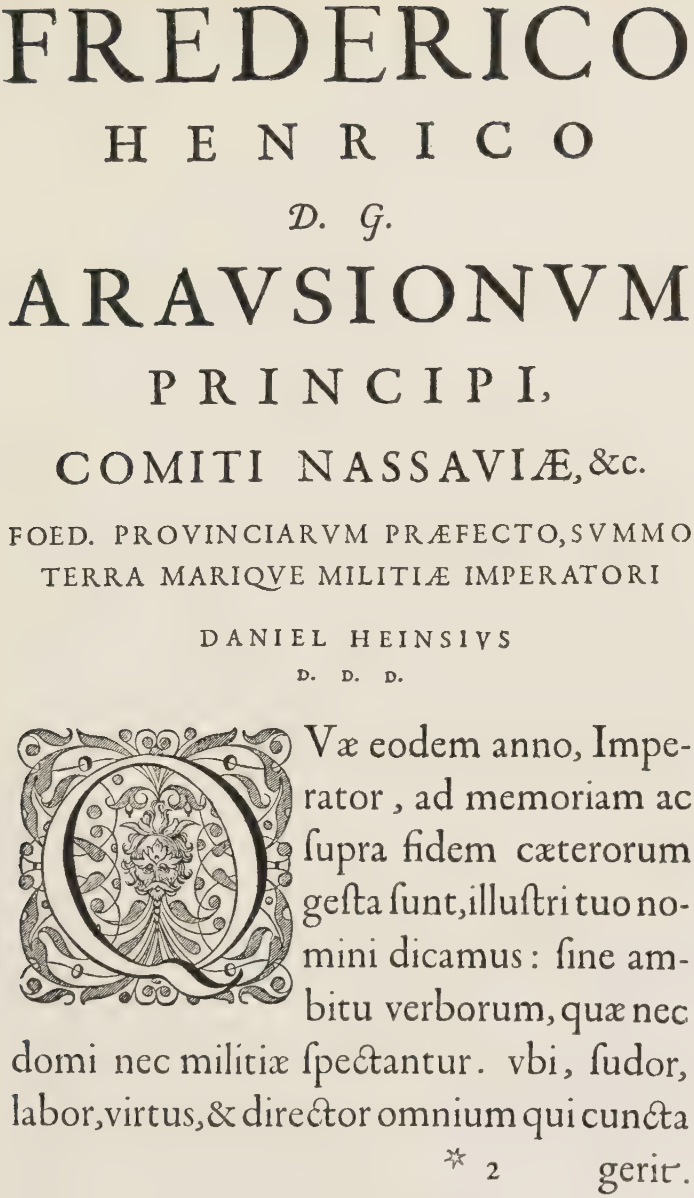
Plantin had seven daughters but no son. He was succeeded in business by one of his sons-in-law, John Moretus, and Moretus in turn by his son Balthasar, who largely expanded the house's operations. The business continued in the hands of Plantin's descendants until 1867, when the building and its contents were purchased by the city of Antwerp and converted into a museum which is the mecca annually of thousands of tourists, particularly those interested in the "art preservative."

Elzevir is the name of a distinguished family of printers and publishers which flourished in Holland for more than a hundred years, beginning near the close of the sixteenth century. The founder of the house was Louis Elzevir, who was born in Flanders, probably at Louvain, where he spent his early years, and probably in 1540, although the exact date is unknown. Because of his religious beliefs Elzevir removed in 1580 to Leyden, the seat of a university and next to Amsterdam the most important city in Holland. He began as a bookbinder, later added bookselling, and was unsuccessful in both. Then he added publishing, producing his first work, *I. Drusii Ebraicarum Quaestionum*, in 1582. He died in 1617.

Louis left six sons, of whom the eldest, Matthew, and the youngest, Bonaventure, elected to carry on their father's business at Leyden. Louis II and Gilles, the second and third sons of Louis I, became book-dealers at The Hague, while Josse, the fourth son, went into the same business at Utrecht. Matthew, Gilles, and Bonaventure all left children who reaped the great rewards of the Elzevir reputation of the third generation and added new lustre to the family name.

Matthew and Bonaventure Elzevir, at Leyden, had the assistance of Isaac, the second son of Matthew, in charge of the printing. This Isaac was made Printer to the University of Leyden in 1620, after which this Elzevir branch was housed on the University grounds for ninety years. Matthew retired in 1622 and was succeeded in the partnership by Abraham, his eldest son. In 1625 Matthew's son Isaac retired as printer. From that time Bonaventure and his nephew, Abraham, conducted both the printing and publishing until 1652. In that year these two Elzevirs retired, each in favor of a son, John, son of Abraham, and Daniel, son of Bonaventure. John was left alone at Leyden when Daniel went to Amsterdam in 1655. John of Leyden died in 1661. The widow, Eva Van Alpen, and heirs (really the widow) carried on until her son Abraham took over the business in 1681, at the age of twenty-eight. He ceased printing in 1702. The plant and materials were sold at auction in 1713 for the benefit of his daughter and to satisfy the creditors of these last unprofitable years.

At The Hague, Louis, the second son of the first Louis, started a bookstore in 1590. He occasionally



FREDERICO
HENRICO
D. G.
ARAVSIONVM
PRINCIPI,
COMITI NASSAVIÆ, &c.
FOED. PROVINCIARVM PRÆFECTO, SVMMO
TERRA MARIQVE MILITIÆ IMPERATORI

DANIEL HEINSIVS
D. D. D.

QVæ eodem anno, Imperator, ad memoriam ac ſupra fidem cæterorum geſta ſunt, illuſtri tuo nomini dicamus: ſine ambitu verborum, quæ nec domi nec militiæ ſpectantur. vbi, ſudor, labor, virtus, & director omnium qui cuncta

✲ 2 gerit.

First reading page of an Elzevir folio volume printed at Leyden, 1631.

printed a work, the first in 1594, the second in 1599, maybe with the help of his brother Gilles, and the ninth and last (by Louis) in 1619. The last three he printed in Italics. In 1621 the business at The Hague passed into the hands of Jacob, the third son of Matthew Elzevir and a nephew of the second Louis. Jacob issued three books, probably from his own presses, in the fifteen years he was in business at The Hague. The business ceased there in 1636.

At Amsterdam another Louis Elzevir started as printer and publisher in 1638. He was the son of Josse Elzevir, the bookdealer at Utrecht. The business was successful at Amsterdam until Louis' death in 1655, when he was succeeded by his son Louis, who took into partnership his father's cousin Daniel Elzevir (son of Bonaventure), and together they continued until 1664. Then Louis died and Daniel continued an even more successful business until his death in October, 1680. The widow, Anne, closed out the business the next March, but printed six more works with the Elzevir imprint before she ceased.

At Utrecht there was an Elzevir Press for a few years. Pierre Elzevir, a nephew of Louis of Amsterdam and grandson of Josse, began at Utrecht in 1667 and issued his last book there in 1675. In addition there were many allied firms in the Low Countries which had Elzevir connections, either in partnerships or using the name without warrant. Even as late as 1770 the works of Ovid were published at Amsterdam as "*Du Fonds des Elzevirs*."

The innovations of the Elzevir family marked a definite step in publishing and to a certain extent in printing also. They were the first publishers to issue on a considerable scale, in addition to the usual religious books and the classics, books in series that would correspond to those issued by the publishers of the present day. Notable among the Elzevir series were the small history books known as *The Republics*, of pocket size, each of the volumes devoted to a different country. A small clear type face firmly printed upon thin paper of good quality gave them immediate popularity. As printers the Elzevirs followed Aldus in producing volumes of small size, but their operations were on so much more extensive a scale as practically to establish a precedent. Putnam says of their publications: "They included the most considerable and comprehensive series of important literature that had been associated with any imprint since the invention of printing, while it is also in order to remember that a very large proportion of the volumes represented the highest development of the art of typography. After two centuries of competition, the country of Koster had, in the work of the printing press, unquestionably outclassed the country of Gutenberg and the rest of the world."

CHAPTER XV

WILLIAM CAXTON AND HIS CONTEMPORARIES

WHEN we come to examination of the circumstances of the introduction of printing from movable types into England, we find a situation different from that of other countries. The inspiration to make beautiful books supplied by the elaborately illuminated manuscripts produced in the Continental countries, particularly in Italy, was not to be found in England. There was, it is true, an established trade in manuscripts, but as a rule the wares offered were not distinguished by artistic quality. There were few English illuminators of the ability of those of Italy to provide models for the printers.

In yet another respect the history of early English printing fails to follow precedent. We have seen that in every country of the Continent it was wandering Teutons, singly or in company, who set up the first presses. German printers, however, did not carry the art of printing into the British Isles. The first printer in England was an Englishman, William Caxton, born, he tells us, in the Weald (woody part) of Kent, and those who followed immediately after him were of French extraction. Early English printing is distinguished by the further fact that in England alone of the European countries the first book was printed in the vernacular and not in Latin.

Germany, however, had a share in the beginning of English printing by reason of the fact that Caxton began his printing experience in Cologne on the Rhine, where he was a resident for part of the thirty years he had spent on the Continent. Not many of the details of Caxton's early life are known. Born probably in 1420, he was apprenticed at an early age to the "mercer," Robert Large, at one time Sheriff and at another time the Lord Mayor of London. On Large's death in 1441 the apprenticeship came to an end. Caxton received from Large a legacy of "twenty marks," considered a respectable sum and important as testifying to his good behavior and integrity.

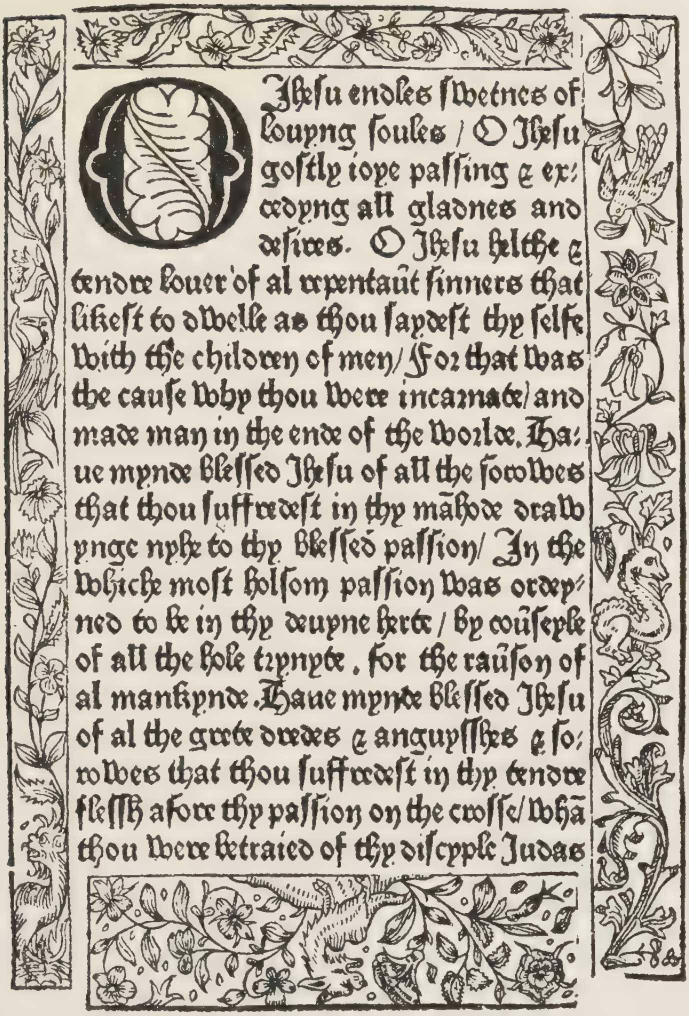
Mercers in Caxton's time were general merchants, trading in all kinds of goods and in various countries, and it was only natural that in following his vocation the youthful Caxton should have visited other parts of Europe. In the brief reference he makes to this phase of his career he mentions being in Brabant, Flanders, Holland, and Zeeland, but "never in France."

Caxton eventually became governor of the company of English merchants of which he was a member. In 1469 he gave up this business to enter the service of the Duchess of Burgundy, sister of Edward IV of England and wife of Charles, the reigning Duke. Caxton served his noble patroness as secretary and probably as financial adviser, but the principal attraction of the post seems to have been that it was a sinecure, with little in the way of duty, and thus offered leisure for literary pursuits. Caxton at the behest of the Duchess translated into English Le Fèvre's *Recuyell of the Historyes of Troye* and *The Game and Playe of the Chesse*, both of which he subsequently printed and published.

We have the statement of Wynken de Worde, Caxton's foreman and successor, that Caxton's first printing experience was in connection with the production of an edition of Bartholomew's *De Proprietatibus Rerum* at Cologne. The date was 1471–72. His part in a printing enterprise at Bruges is referred to in the preceding chapter.

The disaster that came to the Duke of Burgundy in his war with the Swiss affected Caxton's fortunes to an extent that caused him to return to England. He set up a Press in the Almonry of Westminster, near the famous Abbey, at the Sign of the Red Pale, and from it was issued on December 13, 1476, a papal Indulgence granted to Henry Langley and his wife. It was followed on November 18, 1477, by *The Dictes or Sayengis of the Philosophres*, the first book printed in England. Within five years at least thirty works, varying in size from a pamphlet to Chaucer's *Canterbury Tales* with 374 leaves, were issued by this Press.

Unlike the early printers of the other countries, Caxton produced very little ecclesiastical literature. Neither he nor his immediate contemporaries and successors attempted an edition of the Bible. The first complete edition of the Bible in the English language, Coverdale's translation, was printed on the Continent and not until about 1535, more than half



O Jheſu endles ſwetnes of louyng ſoules / O Jheſu goſtly ioye paſſing ⁊ exceedyng all gladnes and deſires. O Jheſu helthe ⁊ tendre louer of al repentaũt ſinners that likeſt to dwelle as thou ſaydeſt thy ſelfe with the children of men/ For that was the cauſe why thou were incarnate/ and made man in the ende of the worlde. Haue mynde bleſſed Jheſu of all the ſorowes that thou ſuffredeſt in thy mãhode drawynge nyhe to thy bleſſed paſſion/ In the whiche moſt holſom paſſion was ordeyned to be in thy deuyne herte / by coũſeyle of all the hole trynyte . for the raũſon of al mankynde. Haue mynde bleſſed Jheſu of al the grete dredes ⁊ anguyſſhes ⁊ ſorowes that thou ſuffredeſt in thy tendre fleſſh afore thy paſſion on the croſſe/ whã thou were betraied of thy diſcyple Judas

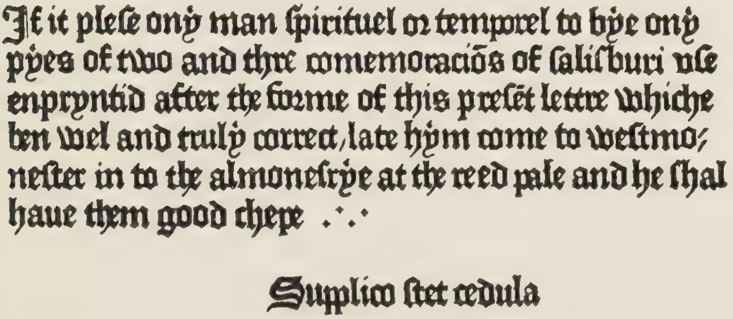
First page of the *Fifteen Oes*. Printed by William Caxton, Westminster, 1491.
The only work in which Caxton used a decorative border.

a century after Caxton had set up his Press at Westminster. It was probably printed by Christopher Froschover in Zurich, but the facts about it are not definitely known.

Familiarity with the Holy Scriptures on the part of the laity was discouraged in Caxton's time and the times immediately preceding it. It was within the same century in which he began to print, in the year 1415, that Parliament enacted a law providing "that whosoever they were that should read the scriptures in their mother tongue [which was then called 'Wiclif's learning'] they should forfeit land, cattle, body, life, and goods from their heirs forever and be condemned for heretics and they should suffer death in two manner of kinds: that is, they should first be hanged for treason against the King, and then be burned for heresy against God." It was only two years previously that another law had been enacted permitting servants, farmers, and mechanics to put their children to school, and long after this period these classes of the common people dared not educate their sons for the Church without license to do so from their lords. This state of affairs did not prevail in Caxton's time, but the sentiment among the ruling classes which caused it still persisted in some degree and not only restricted the market for the product of the printing press, but hedged it about with conditions which added to the hazards of the industry. In 1540, according to Timperley, Richard Grafton was imprisoned for six weeks "for printing Matthew's

Bible, and the great Bible without notes and before his release he was bound in a penalty of £100 that he should neither sell nor imprint, nor cause to be imprinted, any more Bibles, until the King and clergy should agree upon a translation."

Caxton declined to follow another precedent established by the Continental printers, that of printing the classics. Possibly he knew of the financial disaster that had followed more than one enterprise of that kind and, being a shrewd business man, kept himself free from the likelihood of a similar experience. Seymour de Ricci in *A Census of Caxtons*, published by the Bibliographical Society in 1909, listed an even 100 books as having been printed by Caxton. Duff states the number to have been 101. Pollard gives this as about one-fourth of the total number of books printed in England by all the printers there before the close of the fifteenth century.



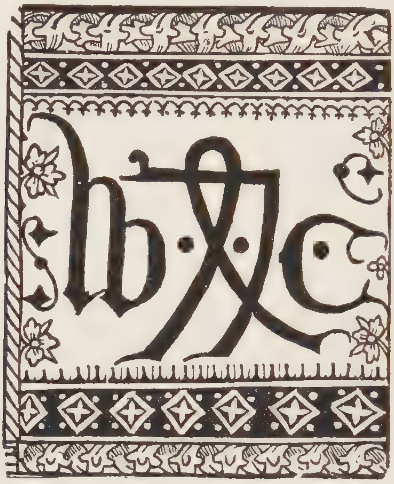
If it pleſe ony man ſpirituel or temporel to bye ony pyes of two and thre comemoraciōs of ſaliſburi uſe enpryntid after the forme of this preſēt lettre whiche ben wel and truly correct, late hym come to weſtmoneſter in to the almoneſrye at the reed pale and he ſhal haue them good chepe .·.

Supplico ſtet cedula

An advertisement of pyes (a sort of ecclesiastical calendar) printed by William Caxton. The line in Latin at the bottom is a fifteenth-century version of "Please do not tear down the bill."

De Ricci's list begins with *The Game and Playe of the Chesse* (Bruges, about 1475) and ends with *The Lyf of the Holy and Blessed Vyrgyn Saynt Wenefrede* (about 1485). The date of Caxton's death is unknown, but it is believed to be 1491.

Caxton employed during his sixteen years as a printer (1475 to 1491) eight different fonts of type.



The Caxton mark.

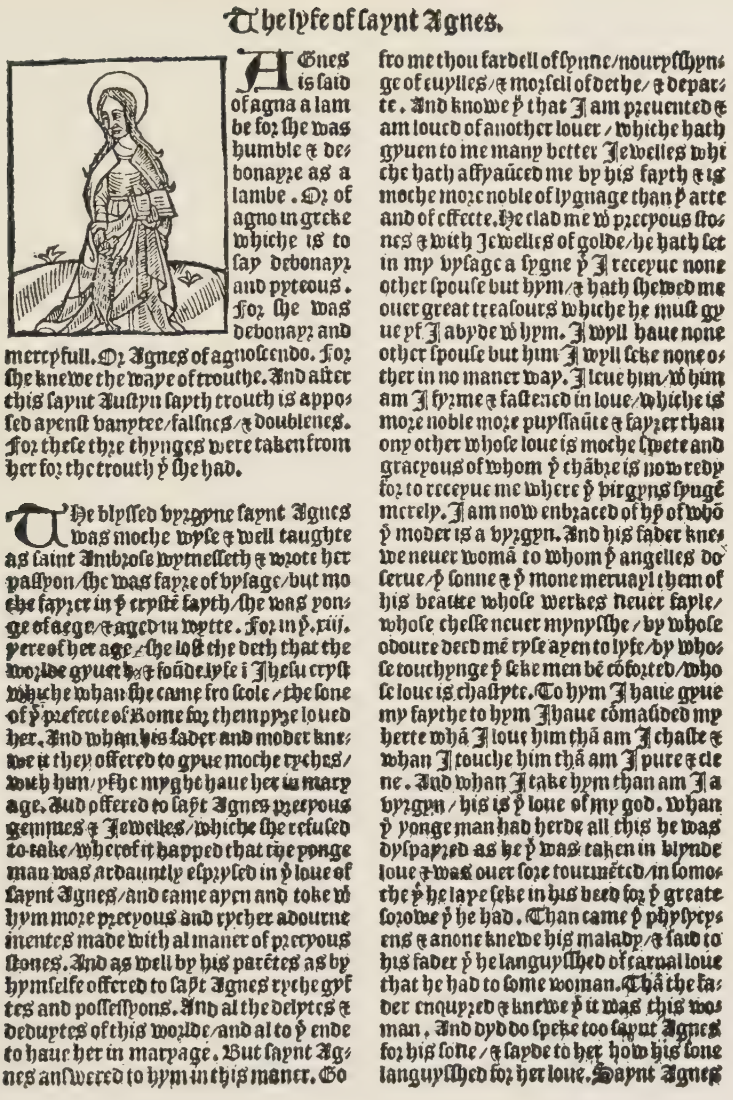
Blades considers it probable that the first two were cast in Bruges under Caxton's direction and that he took the second with him to England. He is believed to have become his own type-founder after his arrival at Westminster.

Caxton used only three punctuation marks: the comma of two lengths, long and short; the semicolon; and what Blades calls a "lozenge-shaped period dot" for a period. No rule seems to have been observed in punctuating his sentences; indeed, some books, those of poetry for instance, are entirely devoid of punctuation. Paragraph marks and initials in a different color were used to designate the beginnings of sentences.

In the first Caxton books the lines were of unequal length. Blades believes that this was the result of the use of a composing stick without a setting rule, which would make even adjustment of lines difficult. He refers also to another peculiar custom: "Sometimes, when a word would come into a line with a little reduction of the space between the last two words, the space was reduced accordingly, but more often a syllable at the end of the line was contracted, such as 'men' into 'me,' or 'vertuous' into 'vertuo.' Most often the compositor, knowing the practice to be understood by his readers, would fill his line with just so many letters as his measure would take, and accordingly it is common to find words divided thus: why/che, th/at, w/ymen, w/iche, m/an. But once the 'setting rule' was brought into use, and the various words of a line could be pushed about, and the spaces between them augmented or reduced with ease, all that was altered." Caxton, unlike practically all of the other early printers, did not use direction-words at the bottom of his pages. All of his books are without title pages, he used no running titles on the pages, and he seldom used capital letters either for proper names or to begin sentences.

Caxton began to use woodcut illustrations in 1481 but employed no wood initials in his books until 1484, although simple initials appear in Indulgences printed in 1480 and 1481. The famous printer's mark made its first appearance in 1487, in a book printed for Caxton at Paris by George Mainval. At first the mark was used by Caxton at the beginning of the volume but later was transferred to the end. Its meaning is still a matter of speculation. "W. C." of course is understandable, and "S. C." probably means *Sancta Colonia* (Cologne). The central figure in the device is usually accepted as having reference to the year "74" and marking some significant date in Caxton's career.

Caxton was distinguished not only by his printing but also because of his ability as editor and publisher. "Wonderful as his diligence in presswork may appear," says Duff, "it is still more wonderful to consider how much literary work he found time to do in the intervals of his business. He was the editor of all the books he printed, including that great undertaking, the *Golden Legend*. Even on his deathbed he was still at work." "As to Caxton's industry," says Blades, "it was marvelous: at an age when most men begin to take life easily, he not only embarked in an entirely new trade, but added to the duties of its general supervision and management, which could never have been light, the task of supplying his workmen with copy from his own pen. The extraordinary amount of printed matter, original and translated, which he put forth has already been noted; but there



The lyfe of ſaynt Agnes.

AGnes is ſaid of agna a lambe for ſhe was humble & debonayre as a lambe. Or of agno in greke whiche is to ſay debonayr and pyteous. For ſhe was debonayr and mercyfull. Or Agnes of agnoſcendo. For ſhe knewe the waye of trouthe. And after this ſaynt Auſtyn ſayth trouth is appoſed ayenſt vanytee/falſnes/& doublenes. For theſe thre thynges were taken from her for the trouth ẏ ſhe had.

THe blyſſed vyrgyne ſaynt Agnes was moche wyſe & well taughte as ſaint Ambroſe wytneſſeth & wrote her paſſyon/ſhe was fayre of vyſage/but moche fayrer in ẏ cryſtē fayth/ſhe was yonge of aege/& aged in wytte. For in ẏ .xiij. yere of her age/ſhe loſt the deth that the worlde gyueth/& foūde lyfe ī Iheſu cryſt whiche whan ſhe came fro ſcole/the ſone of ẏ prefecte of Rome for the empyre loued her. And whan his fader and moder knewe it they offered to gyue moche ryches/with hym/yf ſhe myght haue her in maryage. And offered to ſaȳt Agnes precyous gemmes & Iewelles/whiche ſhe refuſed to take/wherof it happed that the yonge man was ardauntly eſpryſed in ẏ loue of ſaynt Agnes/and came ayen and toke wͭ hym more precyous and rycher adournementes made with al maner of precyous ſtones. And as well by his parētes as by hymſelfe offered to ſaȳt Agnes ryche gyftes and poſſeſſyons. And al the delytes & deduytes of this worlde/and al to ẏ ende to haue her in maryage. But ſaynt Agnes anſwered to hym in this maner. Go fro me thou fardell of ſynne/nouryſſhynge of euylles/& morſell of dethe/& departe. And knowe ẏ that I am preuented & am loued of another louer/whiche hath gyuen to me many better Iewelles whiche hath affyaūced me by his fayth & is moche more noble of lygnage than ẏ arte and of effecte. He clad me wͭ precyous ſtones & with Iewelles of golde/he hath ſet in my vyſage a ſygne ẏ I receyue none other ſpouſe but hym/& hath ſhewed me ouer great treaſours whiche he muſt gyue yf I abyde wͭ hym. I wyll haue none other ſpouſe but him I wyll ſeke none other in no maner way. I loue him/wͭ hym am I fyrme & faſtened in loue/whiche is more noble more puyſſaūte & fayrer than ony other whoſe loue is moche ſwete and gracyous of whom ẏ chābre is now redy for to receyue me where ẏ virgyns ſyngē merely. I am now enbraced of hȳ of whō ẏ moder is a vyrgyn. And his fader knewe neuer womā to whom ẏ angelles do ſerue/ẏ ſonne & ẏ mone meruayl them of his beaute whoſe werkes neuer fayle/whoſe cheſſe neuer mynyſſhe/by whoſe odoure deed mē ryſe ayen to lyfe/by whoſe touchynge ẏ ſeke men bē cōforted/whoſe loue is chaſtyte. To hym I haue gyue my faythe to hym I haue cōmaūded my herte whā I loue him thā am I chaſte & whan I touche him thā am I pure & clene. And whan I take hym than am I a vyrgyn/his is ẏ loue of my god. Whan ẏ yonge man had herde all this he was dyſpayred as he ẏ was taken in blynde loue & was ouer ſore tourmēted/in ſomoche ẏ he laye ſeke in his beed for ẏ greate ſorowe ẏ he had. Than came ẏ phyſycyens & anone knewe his malady/& ſaid to his fader ẏ he languyſſhed of carnal loue that he had to ſome woman. Thā the fader enquyred & knewe ẏ it was this woman. And dyd do ſpeke too ſaynt Agnes for his ſone/& ſayde to her how his ſone languyſſhed for her loue. Saynt Agnes

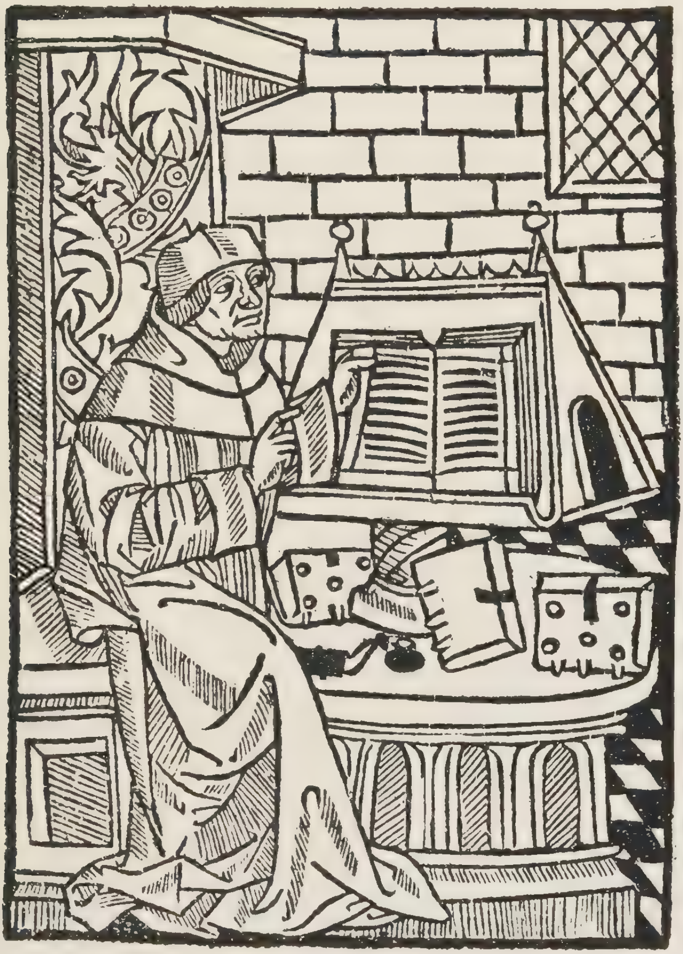
Page from *The Golden Legend.* Printed by Wynken de Worde, Westminster, 1504.

seems reason to believe that some of his works, both printed and manuscript, have been entirely lost. . . . We may conclude that time will yet reveal to us other specimens." One great service Caxton rendered to literature was to print Malory's *Le Morte d'Arthur*. But for his edition of that great work it might have been forever lost.

Books printed by Caxton are among the greatest prizes of collectors and bring high prices. Quaritch, the well-known London dealer, in his catalogue entitled "Monuments of Typography" issued in 1897, offered a *Dictes or Sayengis of the Philosophres* (1477) for $7,500 and a copy of Chaucer's *Canterbury Tales* for $12,500. Eleven copies of *Canterbury Tales* (about 1478) are in existence, of which only two are perfect, missing leaves having been added to them from imperfect copies. The only known perfect copy of Malory's *Le Morte d'Arthur* (1485) was sold by Francis Bernard, physician to James II, for two shillings sixpence. In 1885 it was bought by Quaritch for nearly $10,000 and later purchased by Robert Hoe. At the dispersal of the Hoe library in 1911 Mr. Morgan paid $42,800 for it. Facsimiles of Caxton's works have been frequently made and are to be found in most book collections.

As in the case of other early printers, we know nothing of Caxton's looks. No portrait of him is authentic. Of the one most frequently seen, that in which he wears a sort of turban and a pointed beard, Dibdin says: "A portrait of Burchiello, the Italian poet, from an octavo edition of his work on Tuscan

¶ Multoꝝ vocabuloꝝ equiuocoꝝ Interpꝛetatio
Magiſtri Johãnis de Garlandia: grammatico et
latini cupido, permaxime neceſſaria Incipit.

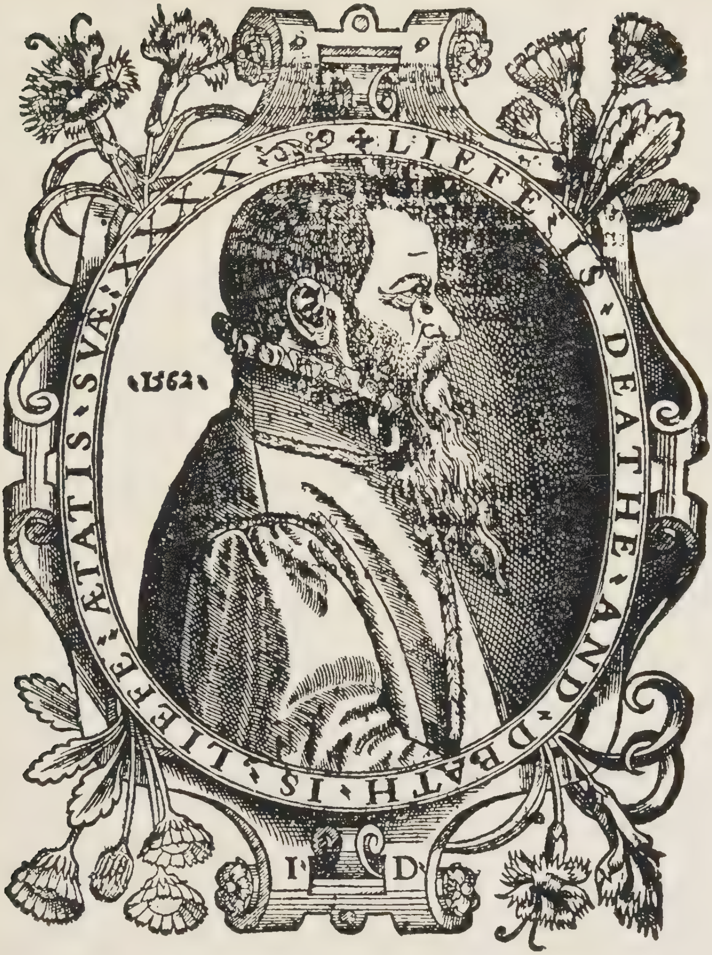


Title page of John de Garlandia's *Multorum Vocabulorum Equivocorum Interpretatio.* Printed by Richard Pynson, London, 1514.

poetry, of the date of 1554, was inaccurately copied by Faithorn for Sir Hans Sloane, as the portrait of Caxton." Blades adds: "In Lewis's *Life* this portrait was improved by adding a thick beard to Burchiello's chin, and otherwise altering his character; and in this form the Italian poet made his appearance, upon copper, as Caxton." Occasional supposed autographs of Caxton have been offered, but Blades recommended that they be accepted with caution.

Caxton was succeeded in the proprietorship of the Press at Westminster by Wynken de Worde, who had been his foreman. De Worde was a native of Lorraine in France who did not think enough of his adopted country to prompt him to become one of its citizens until five years after Caxton's death. He continued to print at Westminster until 1500, producing there about a hundred books. Then he removed to London, where up until the time of his death in 1534 he produced about five hundred books. De Worde was the first printer in England to use an Italic type face. The best that can be said about his work as a printer is that it was uneven. He printed some books well and some badly, but the major part of his printing was indifferent. For his scholastic books he used a Roman font varied occasionally with Italic, but most of his typography was in English black letter.

John Lettou was London's first printer, setting up there in 1480. His origin is unknown, but Duff says that although his surname indicates that he came from Lithuania, his types certainly came from Rome.



Imprinted at London
by John Day, dwelling ouer Alder ſgate,
beneath Saint Martins.

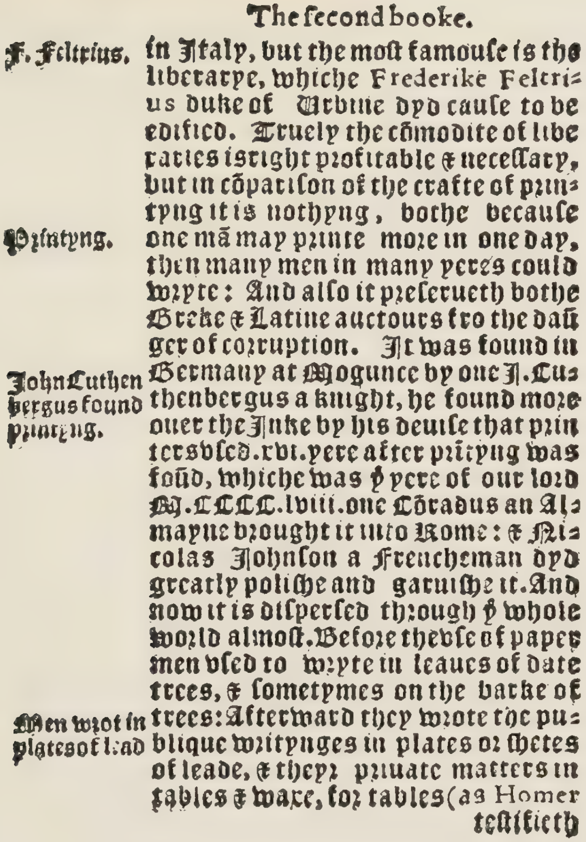
Cum gratia & priuilegio Regiæ Maieſtatis.

The,xxv,day of Nouember.1563.

A John Day title page of 1563 which includes his portrait.

Lettou was the first printer in England to use printed signatures; in his predecessors' books signatures had been noted with a pen. He took William de Machlinia of Belgium as a partner in 1482. They were of no special distinction as printers, although their work was better than Caxton's, but they were succeeded by a printer who takes rank as the best printer in England of the fifteenth century, Richard Pynson, a Norman who probably learned his trade in Rouen. Pynson's first dated book, a *Doctrinale*, appeared in 1492, but he probably produced others before it. He was appointed Printer to the King in 1508 and continued in that office until 1529. In 1515 Henry VIII granted Pynson an annuity of four pounds and the title of Esquire, of which he must have been proud for he included it in his later colophons. His Press produced upwards of four hundred books. He was the first printer in England to use a Roman type face.

Julian Notary, Jean Barbier, and a third partner whose name is unknown but is thought to have been Jean Huvin, set up a Press at the Sign of St. Thomas in London in 1496. In 1498 the unidentified partner retired from the concern, as did shortly afterward Barbier. Notary continued alone until 1518. He had a busy time, as will be seen from this statement by Duff about his movements: "In 1497 he is in London at the Sign of St. Thomas Apostle, in 1498 at Westminster in King Street. About 1502–3 he moves to a house outside Temple Bar, the one probably that Pynson had just vacated. In 1510, while still printing



The ſecond booke.

F. Feltrius.

Printyng.

John Cuthen bergus found printyng.

Men wrot in plates of lead

in Italy, but the moſt famouſe is the liberarye, whiche Frederike Feltrius duke of Urbine dyd cauſe to be edified. Truely the cõmodite of liberaries is right profitable & neceſſary, but in cõpariſon of the crafte of printyng it is nothyng, bothe becauſe one mã may printe more in one day, then many men in many yeres could wryte: And alſo it preſerueth bothe Greke & Latine auctours fro the daũger of corruption. It was found in Germany at Mogunce by one I. Cuthenbergus a knight, he found moreouer the Inke by his deuiſe that printers vſed. xvi. yere after prĩtyng was foũd, whiche was ẏ yere of our lord M.CCCC.lviii. one Cõradus an Almayne brought it into Rome: & Nicolas Johnſon a Frencheman dyd greatly poliſhe and garniſhe it. And now it is diſperſed through ẏ whole world almoſt. Before the vſe of paper men vſed to wryte in leaues of date trees, & ſometymes on the barke of trees: Afterward they wrote the publique wrytynges in plates or ſhetes of leade, & theyr priuate matters in tables & waxe, for tables (as Homer teſtifieth

Page from Thomas Langley's *Abridgement of the Notable Works of Polidore Vergile,* on which appears mention of Gutenberg as the inventor of printing. Printed by Richard Grafton, London, 1546.

at the same place, he had a shop in St. Paul's Churchyard at the Sign of the Three Kings. In 1515 he is at the Sign of St. Mark in St. Paul's Churchyard, in 1518 again at the Sign of the Three Kings."

Printing at Oxford is believed by most authorities to have been begun in 1478, although a book is extant which bears the date MCCCCLXVIII. The name of the printer is unknown, but he is thought to have been Theodore Rood, who learned his art in Cologne; it is thought also that an X was omitted from the date given in the book, making it ten years earlier than it should have been. The career of this first Oxford Press ended in 1478, but printing was resumed there in 1481.

There remains to be mentioned only one other fifteenth-century English printer, and his name cannot be given. Because of a casual reference to him by Wynken de Worde as the "sometime schoolmaster of St. Albans," he is known by that title. He began to print probably in 1479, and eight books, all of the greatest rarity, are ascribed to him.

The sixteenth century, so far as printing in Great Britain is concerned, will not detain us long. John Day is the name of its best known printer, and he is distinguished by quantity rather than quality. His career began in 1546 and ended with his death in 1584. One of his productions was Fox's *Book of Martyrs*, a work of 2,008 folio pages. Day is said to have been the father of twenty-six children. Further mention of him occurs in Chapter XXII.

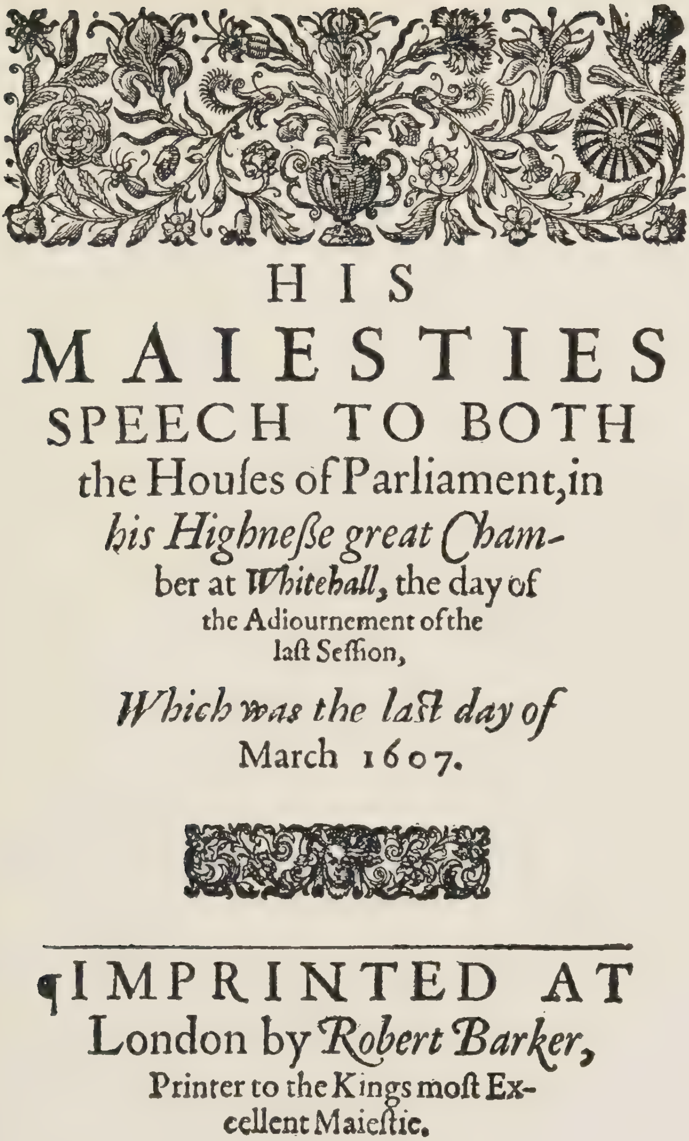
Only one of Day's contemporaries will be mentioned, Richard Grafton, who was also an author and publisher. Originally a grocer, he became connected with printing about 1536 and eventually was appointed King's Printer. Grafton is best known because of the *Chronicle* he issued in 1569. He died in 1573.

CHAPTER XVI

FROM WILLIAM CASLON TO WILLIAM MORRIS

POLLARD specifies the first half of the seventeenth century as the period when printing in England "was certainly worse than in any other country." There seems, however, no reason why the first half or any particular part of the century should be singled out for that unenviable distinction. Printing was at a low ebb throughout the whole of the hundred years that followed the termination of the Elizabethan era and the accession of James VI of Scotland to the throne of England. The reason may be found in the circumstance that it was a period of incessant religious controversy, led always by the Throne or the powers that nestled close to it. The printing press was not then the tool of an art, but an instrument of propaganda. Privilege to print depended upon considerations other than that of ability to print well.

The eighteenth century brought a beneficial influence with the advent of William Caslon, who was first an engraver upon metals and later and for nearly a half-century the leading and almost the only designer and founder of types used by English printers. Detailed reference to Caslon belongs to later chapters, and there we shall have occasion to refer also to a well-known contemporary in the history of English

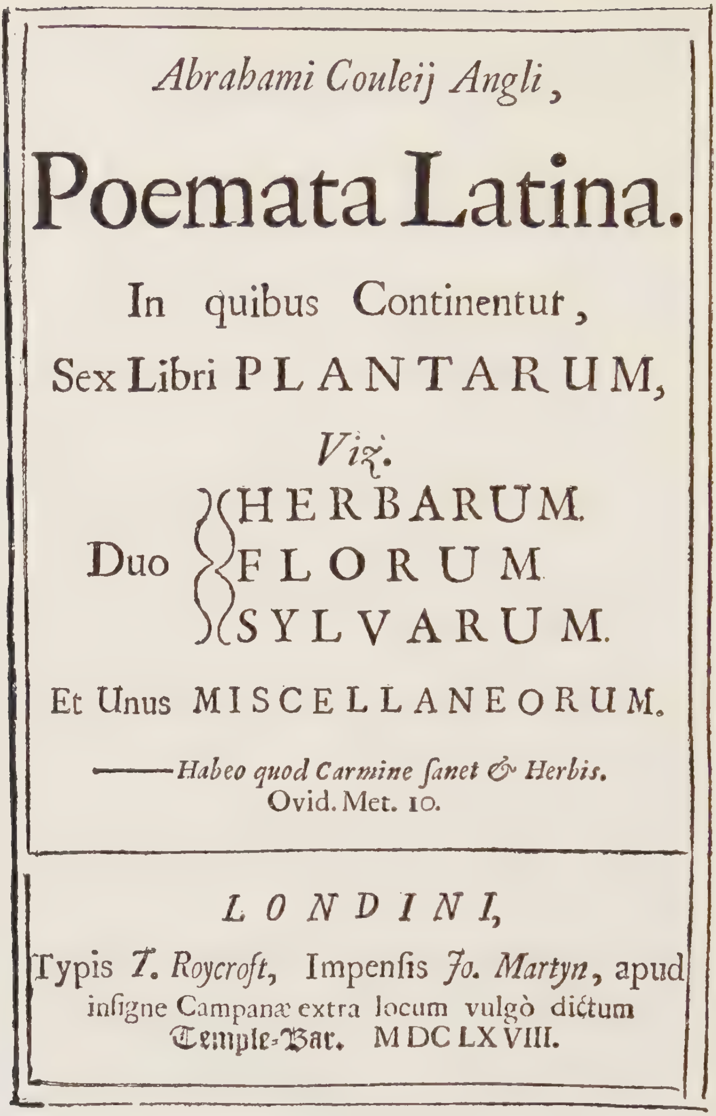


HIS
MAIESTIES
SPEECH TO BOTH
the Houſes of Parliament, in
his Highneſſe great Cham-
ber at ***Whitehall***, the day of
the Adiournement of the
laſt Seſſion,

Which was the laſt day of
March 1607.

¶ IMPRINTED AT
London by *Robert Barker*,
Printer to the Kings moſt Ex-
cellent Maieſtie.

Title page of *His Maiesties Speech*. Printed by Robert Barker, London, 1607.



Abrahami Couleij Angli,

Poemata Latina.

In quibus Continentur,
Sex Libri PLANTARUM,
Viz.
HERBARUM.
Duo FLORUM.
SYLVARUM.
Et Unus MISCELLANEORUM.

——*Habeo quod Carmine ſanet & Herbis.*
Ovid. Met. 10.

LONDINI,
Typis *T. Roycroft*, Impenſis *Jo. Martyn*, apud
inſigne Campanæ extra locum vulgò dictum
Temple-Bar. MDCLXVIII.

Title page of a book of Latin poems. Printed by Thomas Roycroft, London, 1668.

printing, John Baskerville, born in the sixth year of the eighteenth century, who was not only a printer, but a type-, ink-, and paper-maker as well. Baskerville began his experiments in type-founding in 1750, started to print in 1757, and was appointed Printer to the University of Cambridge in 1758. It was he who first "hot-pressed" paper and who first made wove paper, which, however, did not become popular until Montgolfier put it on the market. He died in 1775. His experiences as a printer brought him no pecuniary return. "The business of printing . . . which I am heartily tired of and repent I ever attempted," is a remark ascribed to Baskerville by Timperley. He did little printing during his last years.

An outstanding name in the annals of printing in English during the eighteenth century is that of the Foulis brothers, Robert and Andrew, who printed not in England, but in Scotland. Both brothers were successful, artistically and commercially, as printers, but neither began his career as a printer, and both failed financially in later years through enterprises other than printing in which they engaged.

Robert Foulis, born in 1707, commenced his wage-earning career as a barber. Later, in company with his brother, who was five years his junior, he became a teacher of languages. The brothers employed a part of their leisure in travel on the Continent, where they followed a pronounced literary inclination, coming into contact with eminent men and extending their knowledge of books. They made collections of books which they took back to Edinburgh and sold at a profit. Robert Foulis eventually went definitely into the bookselling business, later became a publisher, and in 1742 set up as a printer. The next year he was appointed Printer to the University of Glasgow, and Andrew joined the enterprise soon after the Press was established. The work of the Foulis brothers was severely plain typographically, the presswork was good, and great care was taken to avoid errors. As an instance, the proof sheets of an edition of Horace were exposed in the college grounds, and a reward was offered for the detection of typographical errors; six such errors, notwithstanding this precaution, remained undiscovered until too late for correction.

With the money the Foulis brothers made in their printing and publishing they established a school for art students. They persisted in this enterprise for more than twenty years, but evidently the time was not ripe for such an institution, for it ended in disaster. Andrew died in 1775, and the next year Robert decided to dispose at auction of what remained of their property, the most valuable part being a collection of paintings. He took the paintings to London, and when the sale had been completed and all expenses paid, the balance remaining was but fifteen shillings. The disappointment was so great that it resulted in his death at Edinburgh, on his way back to Glasgow from London.

William Bowyer, whom Timperley extravagantly characterizes as "the most learned and distinguished printer of modern times," was born in London in 1699. His father was a printer of some distinction, and the son, who succeeded to the business in 1737, received a university education. The younger Bowyer was a publisher and a writer and the constant companion of many of the literary personages of his time. He died in 1777.

William Bowyer was succeeded by John Nichols born in 1744, who had been his apprentice and who is credited with ability and distinction equal to that of his former employer. In 1804 Nichols was elected Master of the Stationers Company, which he termed the summit of his ambition. He published a memoir entitled *Literary Anecdotes of the Eighteenth Century* which presents an entertaining picture of the literary life of the time.

Britain was again indebted to Scotland, but from the point of view of nativity only, for another great printer of the eighteenth century. This was William Strahan, born at Edinburgh in 1715. At an early age Strahan went to London and in time became associated with the great printing firm that later came to be known as Eyre and Spottiswoode, King's Printers, which is still in existence as one of the leading printing establishments of England. Strahan was a publisher as well as a printer. Many of the great works of English literature first saw the light of day in his establishment, among them those of Samuel Johnson and the historians Hume and Gibbon. Johnson spoke of Strahan's as "the greatest printing house in London."

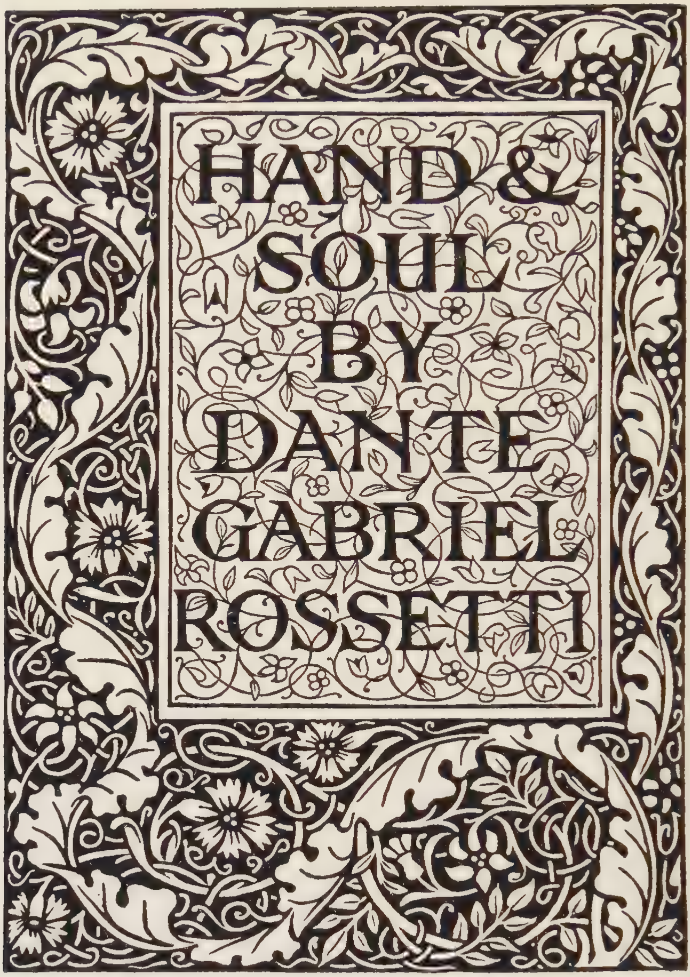
But it is to his friendship for and close association with a great American printer, Benjamin Franklin, that William Strahan owes his principal renown. Strahan was elected to Parliament in 1775, with an illustrious colleague, Charles James Fox, and as a member of His Majesty's Government found much interest in common, aside from the fact that both were printers, with the representative in London of the American Colonies. When they were separated they exchanged frequent letters, and Franklin's missives to Strahan are by no means the least entertaining of his literary remains. The "You are now my enemy" letter is probably the most famous. It was the desire of both Franklin and Strahan that two of their children should marry, but evidently the young people thought differently, for the match never came off. Strahan was Master of the Stationers Company in 1774. He died in 1785, leaving a fortune of 95,000 pounds.

William Bulmer established the Shakespeare Press in the last decade of the eighteenth century in order, to use a slang expression, to put England from the printing point of view "on the map." "While other nations were publishing splendid editions of their favorite authors," he said, "we in this country contented ourselves with such editions of ours as were merely useful," and he proposed to issue works that could make a successful claim to beauty. An edition of Shakespeare's works was the first production of Bulmer and Company, the initial volume appearing in

1791. Dibdin says that it "at once established Mr. Bulmer's fame as the first practical printer of the day." Other fine editions of leading English authors followed in steady succession. The works of Thomas Frognall Dibdin, probably the most prolific, if not always the most trustworthy, writer on bibliography who ever lived, came mainly from the Shakespeare Press and are prized by collectors because of that fact.

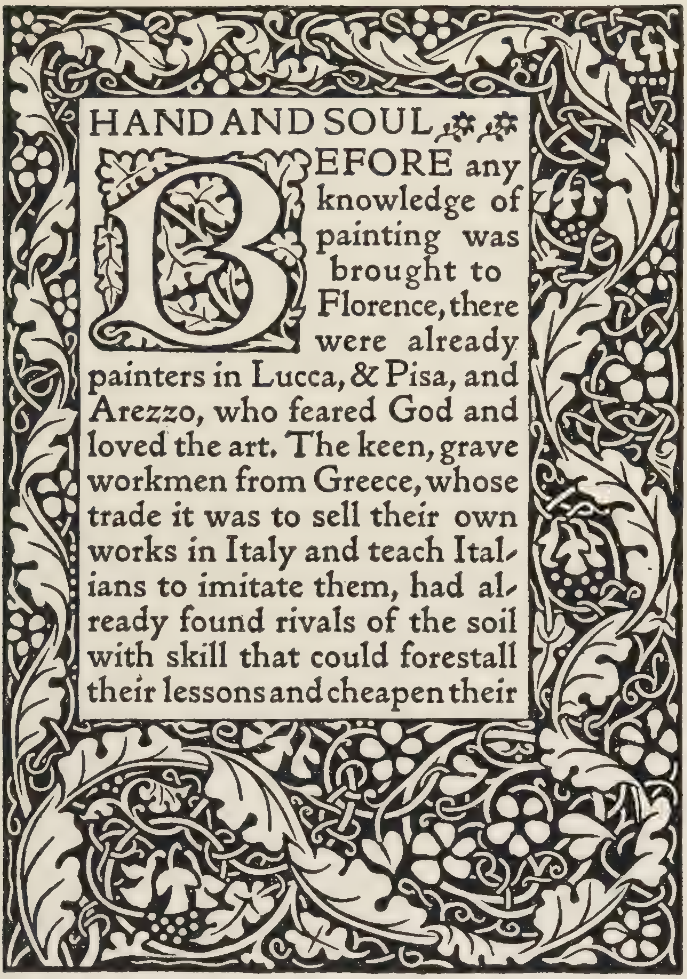
Thomas Bewick, who was the greatest of English wood-engravers, was a boyhood companion and later a business associate of Bulmer. Bewick engraved the ornaments for the Shakespeare Press edition of the *Poems of Goldsmith and Parnell* with such success that George III, who was a book collector and was possessed of some knowledge of printing processes, would not believe that the effects were obtained from wood until the actual blocks were exhibited to him. Bulmer coöperated with Robert Martin, Baskerville's journeyman and successor, in the making of types and ink, and with Whatman, the paper-maker, in the manufacture of paper. Bulmer retired from business in 1819 and died in 1830 in his seventy-fourth year.

Two Whittinghams, uncle and nephew, received the name of Charles. The elder was born near Coventry in 1767. After serving an apprenticeship in printing in that city he went to London in his early twenties. He set up as a printer there, later taking into partnership his foreman, Robert Rowland, to whom he transferred the management of the concern. Whittingham thenceforth gave his personal attention



HAND &
SOUL
BY
DANTE
GABRIEL
ROSSETTI

Characteristic pages from a Kelmscott Press book.



HAND AND SOUL

BEFORE any knowledge of painting was brought to Florence, there were already painters in Lucca, & Pisa, and Arezzo, who feared God and loved the art. The keen, grave workmen from Greece, whose trade it was to sell their own works in Italy and teach Italians to imitate them, had already found rivals of the soil with skill that could forestall their lessons and cheapen their

Printed by William Morris, London, 1895.

to a new business he established at Chiswick under the name of the Chiswick Press, which he continued to conduct until his death in 1840.

Charles Whittingham the younger, born in 1795, became connected with the Chiswick Press in 1824, and its best work was done under his direction, particularly in association with the celebrated English publisher, William Pickering. Both were ardent lovers of good literature, and they combined their talents to a common end, the production of beautiful books. Warren records: "The two men met frequently for consultation. . . . They made it a point, moreover, to pass their Sundays together, either at the printer's house, or at Pickering's." It was at Whittingham's request that the Caslon Old Face type was resurrected from the vaults of the Caslon foundry, an edition of *The Diary of Lady Willoughby*, published in 1844, being one of the first for which it was used. Pickering died in 1854 and Whittingham in 1876.

William Morris influenced the art of printing as no other man in modern times influenced it. Pollard calls attention to the fact that by the end of the seventeenth century the printer, with a few notable exceptions, had disappeared behind the publisher. "Printing," he says, "as an *art* had ceased to exist." Morris was both printer and publisher. He was indeed much more—decorator, poet, weaver of tapestries and rugs, dyer, and designer. But so far as books were concerned, it was their production rather than their distribution that engaged his interest. And he approached each printing project not so much from the standpoint of the typographer, the worker with types, as from that of the designer and decorator, the worker with pencil and brush.

Morris went back to the fifteenth-century printers for his models. His first type face, which he called the Golden type because it was first used for a reprint of Caxton's *Golden Legend*, was modeled upon the types of Nicolaus Jenson. He used only one other type face, which might be called a romanized Gothic, cut in two sizes corresponding to twelve and eighteen point, which he named respectively Chaucer and Troy, after books in which they were first used.

Morris called his printing establishment the Kelmscott Press, Kelmscott being the name of the village near Oxford where Morris in 1871 had established his residence. The Press, however, was located in Hammersmith, a part of the London Metropolitan District. Morris' first book, *The Story of the Glittering Plain*, was issued in 1891, and between that date and the year of his death, 1896, including the work begun by him but finished by the executors of his estate, the product of the Kelmscott Press comprised 53 titles and 65 volumes. "No other printer since printing began," says Pollard, "has ever produced such a series of books as the 53 which poured from the Kelmscott Press during those wonderful seven years, and no book that has ever been printed can be compared for richness of effect with the Chaucer which was the crowning achievement of the Press."

CHAPTER XVII

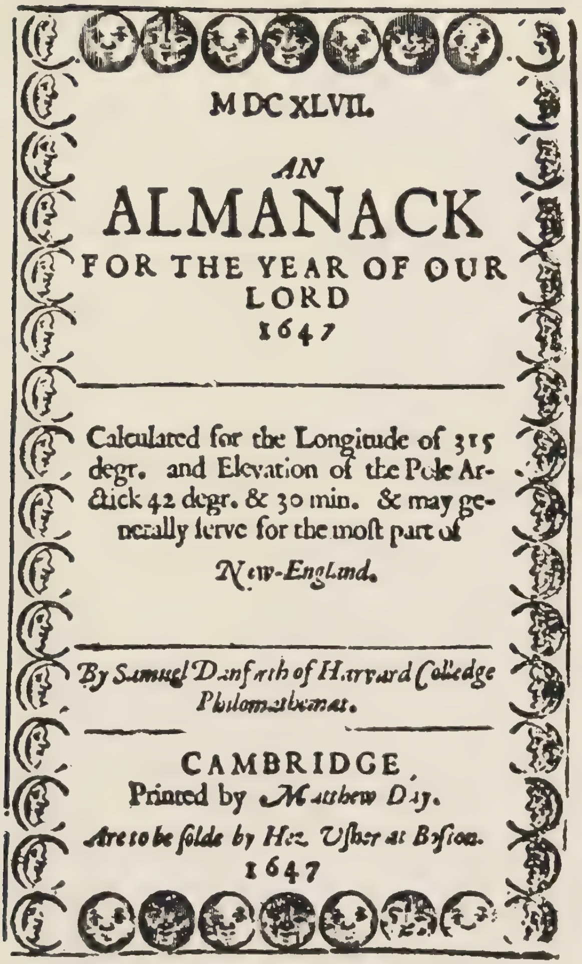
EARLY PRINTING IN AMERICA

CHAPTER XIII has already recorded that printing in the Western Hemisphere did not begin in the English Colonies that had been planted along the Atlantic Coast in what is now the United States of America, but in the country to the south explored and conquered by the great Spanish adventurer Cortez—our neighbor, Mexico.

Almost a full hundred years elapsed before the first Press was set up in the English Colonies, at Cambridge, Massachusetts, in 1638. It was owned by the widow of the Reverend Jose Glover,* who had started with the outfit from England but had died during the voyage. Accompanying the Glovers were Stephen Daye, who was made its manager, and his son Matthew. Matthew was a practical printer, whereas the father was not. Stephen Daye, however, is usually credited with being the first American printer, although he probably did not actually work at the trade. Matthew Daye died in 1649. Only one work, an almanac for 1647, bears his name as printer. No work bearing the name of Stephen Daye has ever been

---

* The Reverend Mr. Glover's name has been spelled in a variety of ways—Jesse, Jos., Josse, and Joseph, and there is authority for each. His own spelling was Jose, as is attested by his will, dated May 16, 1638, still preserved in the Prerogative Court of Canterbury, England. The will is in his own handwriting, and his signature appears three times, with the same spelling each time.



MDCXLVII.

AN
ALMANACK
FOR THE YEAR OF OUR
LORD
1647

Calculated for the Longitude of 315
degr. and Elevation of the Pole Ar-
ctick 42 degr. & 30 min. & may ge-
nerally ſerve for the moſt part of

New-England.

By Samuel Danforth of Harvard Colledge
Philomathemat.

CAMBRIDGE
Printed by *Matthew Day.*
Are to be ſolde by Hez. Uſher at Boſton.
1647

Title page of the first work bearing the imprint of a printer in Colonial America.

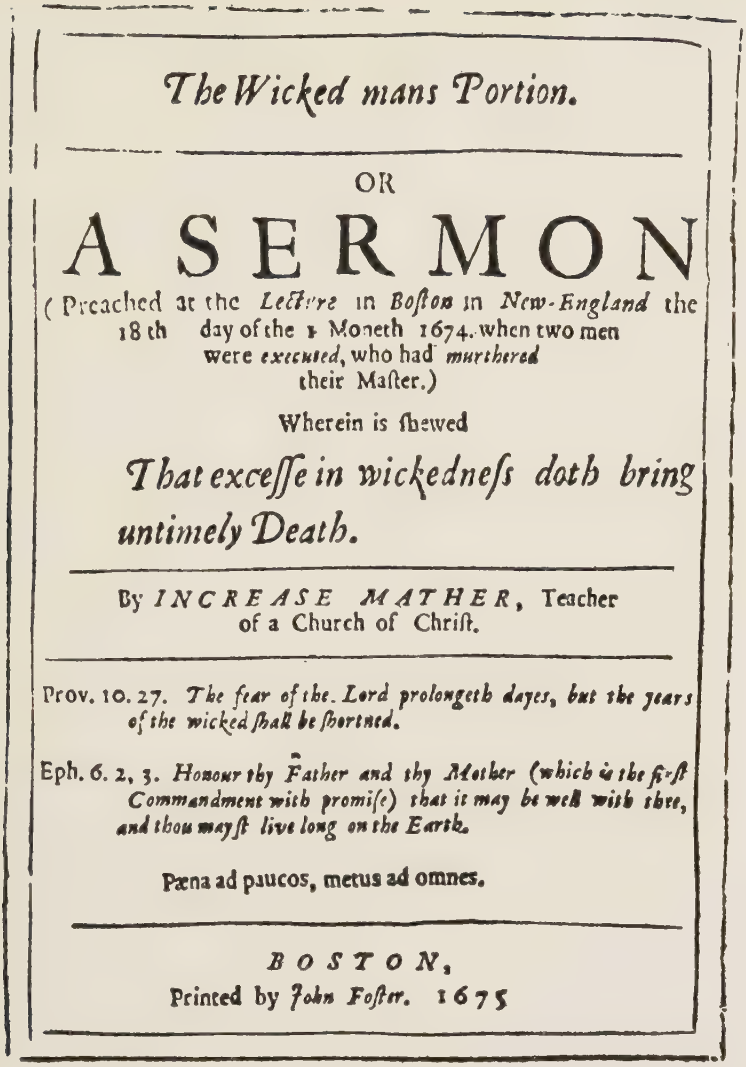
discovered. He died in 1668, aged fifty-eight years. It will be observed that in the accompanying illustration Matthew spelled his surname without the final "e."

Samuel Green commenced work at the Cambridge Press in 1649 and continued with it until his retirement in 1692. Because of his superior craftsmanship, the long period of his activity, and his participation in public affairs, he is the most noted of early New England printers.

Virginia was the second of the American Colonies to set up a Press. William Nuthead was the printer, and the date of his first production was 1682. This fact is established by reference to him in the public records, but what he first printed and in what locality is unknown.

Pennsylvania's first printer was William Bradford, who came from England in 1682 but soon returned to claim a bride, the daughter of Andrew Soule, a London printer from whom Bradford had learned his trade. Bradford returned with his bride to America in 1685 and established himself in business "near Philadelphia." His first production that carried a date was an almanac for the year 1687.

Pennsylvania's most distinguished printer, and the most distinguished printer not only of America but of the world, began his career in Boston. There Benjamin Franklin was born in 1706 and at the age of twelve was apprenticed to his brother James. Five years later he went to Philadelphia, where in 1728 he set up a printing office of his own. He printed broadsides,



The Wicked mans Portion.

OR

A SERMON

(Preached at the *Lecture* in *Boſton* in *New-England* the
18th day of the 1 Moneth 1674. when two men
were *executed*, who had *murthered*
their Maſter.)

Wherein is ſhewed

*That exceſſe in wickedneſs doth bring
untimely Death.*

By *INCREASE MATHER*, Teacher
of a Church of Chriſt.

Prov. 10. 27. *The fear of the Lord prolongeth dayes, but the years
of the wicked ſhall be ſhortned.*

Eph. 6. 2, 3. *Honour thy Father and thy Mother (which is the firſt
Commandment with promiſe) that it may be well with thee,
and thou mayſt live long on the Earth.*

Pœna ad paucos, metus ad omnes.

BOSTON,
Printed by *John Foſter.* 1675

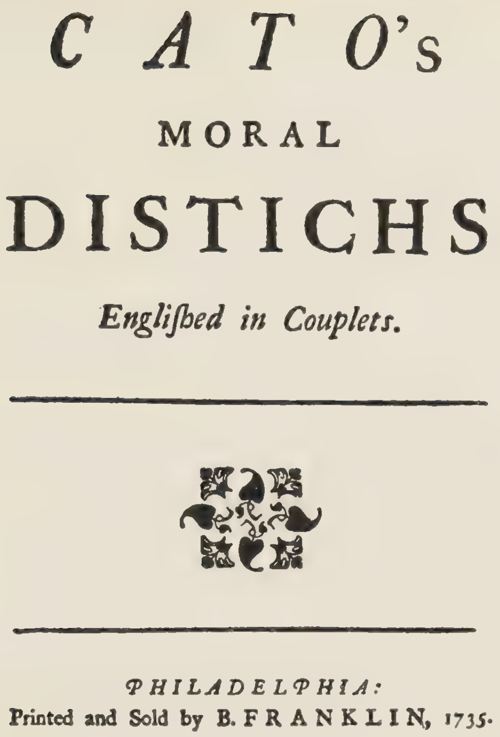
Title page of the first book known to have been printed in Boston books, and pamphlets and published a magazine, a newspaper, *The Pennsylvania Gazette*, and an almanac, "Poor Richard's," which had a widespread circulation and great influence. Franklin retired from active business in 1748 and for the remainder of his life, forty-two years, devoted himself to public service.

Maryland's printing started in 1686, the printer being William Nuthead, who had conferred the same distinction upon Virginia. A court record of that year identifies him, but no specimen of his first work has survived.

William Bradford got into difficulties with the Pennsylvania authorities, and as a result of what he regarded as unjust treatment, he accepted an invitation from the authorities of New York to remove to that town, which had hitherto been without a Press. Bradford set up an office at 81 Pearl Street in 1693 and continued to print until his death in 1752. He was the first Public Printer in New York and also in New Jersey. He established New York's first newspaper, *The New York Gazette*, in 1725.

Connecticut's first printer was Thomas Short, who began in New London in 1709. His first book, *The Saybrook Platform of Church Discipline*, appeared the following year.

James Franklin, elder brother of Benjamin Franklin, from whom the latter learned his trade in Boston, went from that city to Newport, Rhode Island, in 1727 and became Rhode Island's first printer. He died the following year and was succeeded by his widow,



CATO's

MORAL

DISTICHS

Engliſhed in Couplets.

PHILADELPHIA:
Printed and Sold by B. FRANKLIN, 1735.

Title page of the first reprint of a Latin classic to be translated and printed in America.

Ann Franklin, who remained in business to the time of her death in 1763.

Judah Paddock Spooner and Timothy Green established *The Vermont Gazette, or Green Mountain Post Boy* at Westminster, Vermont, early in 1781, thus becoming the state's first printers. Green was not active in the business, being in fact wholly occupied with a printing business he was conducting in New London, Connecticut, and after a short time he withdrew. His father, grandfather, and great-grandfather had been printers.

Maine's first printer was a native son, Benjamin Titcomb, who was born in Falmouth, now Portland. He learned his trade in Newburyport, Massachusetts, and returned to Falmouth to set up as a printer in 1784. Just a year later he and Thomas B. Wait began the publication of *The Falmouth Gazette and Weekly Advertiser.*

The first province in the far South to set up a printer was South Carolina, whither Eleazer Phillips of Boston went by invitation in 1730. He died the year following.

James Parker, who learned his trade with William Bradford, commenced as New Jersey's first printer at Woodbridge in 1751. He established in 1758 *The New American Magazine*, which he continued monthly for more than two years, when it was discontinued because of lack of support.

North Carolina's first printing began the same year as New Jersey's, 1751, at Newbern. James Davis, of Virginia, was the printer, and his first production was a law book of 580 pages.

Delaware's first product of the printing press was entitled *The Child's New Plaything*. It was printed by James Adams at Wilmington in 1761. Adams printed also at Philadelphia and Doylestown, Pennsylvania.

Georgia's printing began with the advent of James Johnston at Savannah in 1762. A year later Johnston started *The Georgia Gazette*, which he continued intermittently until 1802. At New Echota, Georgia, in 1828 there was begun the publication of a newspaper, *The Cherokee Phoenix*, in an entirely new language. The alphabet for it was constructed by Sequoyah, a Cherokee Indian, and the type cast under orders from the Cherokee Nation. The newspaper was suspended in 1835 and the printing outfit removed to Indian Territory.

John Wells was Florida's first printer. He went from Charleston, South Carolina, where he was born, to St. Augustine, and began to print there in 1784. He later returned to Charleston and then went to the Island of Nassau, where he published *The Royal Bahama Gazette*.

Kentucky was the first of the territories on the western frontier to harbor a printing press, and it was another Bradford who set it up. He was John Bradford, of Virginia, who established a newspaper, *The Gazette*, in Lexington, Kentucke (as the name was then spelled), in 1787. Bradford was Kentucky's first Public Printer, and he was also an author. His son

Daniel started in 1803 the first magazine, *The Medley, or Monthly Miscellany*, to be published in the West.

Tennessee's first printing followed closely after the beginning in Kentucky. George Roulstone was the printer, and Rogersville, near the location of the present Home and Sanatorium of the International Printing Pressmen and Assistants' Union, was the place. Roulstone began there in 1791. He later went to Knoxville, where he died in 1804.

Printing in the vast territory north of the Ohio River began in 1793. In that year William Maxwell started at Cincinnati *The Centinel of the Northwest Territory*. Three years later he sold it to Edmund Freeman, who in 1800 moved to Chillicothe.

Colonel Andrew Marschalk of the United States Army was Mississippi's pioneer printer. He was with the first detachment of troops that entered the state after the withdrawal of the Spaniards. With a small printing outfit which he imported from London he established himself at Walnut Hills, two miles above Vicksburg, in 1797 or 1798.

Indiana's printing began at Vincennes. Elihu Stout, a printer from Kentucky, who conveyed his supplies on horseback, established there in 1804 *The Indiana Gazette*, later called *The Western Sun*.

Michigan's advent into the world of printing was signalized, as was Delaware's, by a juvenile publication. It was entitled *The Child's Spelling Book, or Michigan Instructor*, printed at Detroit in 1809 by James M. Miller, who had come from Utica, New York.

The scene again shifts to the South. Printing in Alabama was begun at Huntsville in 1812 with the publication of *The Gazette*. A newspaper called *The Mobile Sentinel*, established by Samuel Miller and John B. Hook in 1811, is believed not to have been actually printed in Mobile.

Kaskaskia, a prosperous town on the Mississippi River, was the first place in Illinois at which printing was done. Matthew Duncan, a Yale College graduate, after two unsuccessful publishing ventures in Kentucky, established *The Illinois Herald*, the first newspaper in the state, at Kaskaskia in 1814.

Wisconsin's printing began in 1833, when John V. Suydam and Albert G. Ellis founded *The Intelligencer* at Green Bay.

CHAPTER XVIII

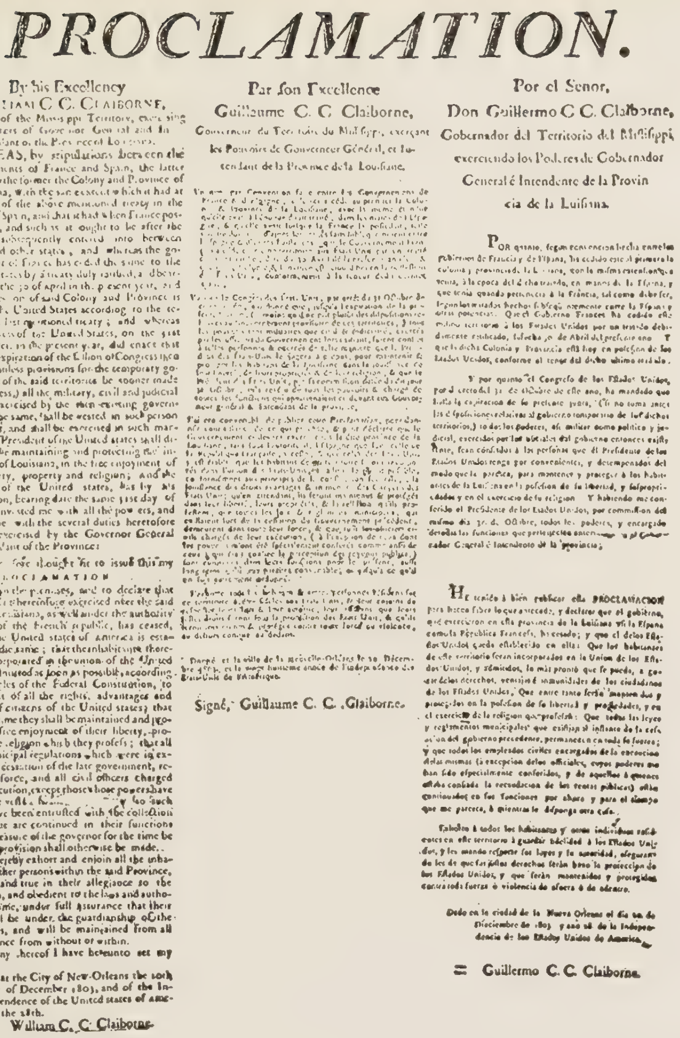
THE PRINTING PRESS CROSSES THE MISSISSIPPI

LOUISIANA had become a Spanish possession when Denis Braud petitioned in 1764 for the exclusive right to print in the province. His first known production was a pamphlet dated New Orleans, October, 1768. Louisiana's first newspaper was the *Moniteur de la Louisiane*, published by L. Duclot and dated August 25, 1794. James Lyon was the first printer who was not a Frenchman. He printed the "Louisiana Bank Ordinance" in 1804.

Joseph Charless, an Irishman, began to print in St. Louis in 1808, becoming the first printer in what is now the State of Missouri but which was then in the Territory of Louisiana. His first book was a volume of *Laws of the Territory of Louisiana.*

The pioneer printer in Texas was a soldier in the Texas Republican Army named Samuel Bangs. He began in Galveston in 1816. Godwin Brown Cotten established *The Texas Gazette* in San Felipe de Austin in 1829.

Printing was begun in Arkansas at Arkansas Post in 1819 by Samuel Woodruff of New York, who took his printing outfit down the Cumberland, Ohio, and Mississippi rivers and up the White River by boat. Woodruff started *The Arkansas Gazette* the same year, and it has been published continuously ever since,



PROCLAMATION.

By his Excellency
WILLIAM C. C. CLAIBORNE,
Governour of the Mississippi Territory, exercising the powers of Governor General and Intendant of the Province of Louisiana.

WHEREAS, by stipulations between the governments of France and Spain, the latter ceded to the former the Colony and Province of Louisiana, with the same extent which it had at the date of the above mentioned treaty in the hands of Spain, and that it had when France possessed it, and such as it ought to be after the treaties subsequently entered into between Spain and other states; and whereas the government of France has ceded the same to the United states by a treaty duly ratified, and bearing date the 30 of April in the present year, and the possession of said Colony and Province is now in the United States according to the tenor of the last mentioned treaty; and whereas the Congress of the United States, on the 31st day of Oct. in the present year, did enact that until the expiration of the session of Congress then sitting, (unless provisions for the temporary government of the said territories be sooner made by Congress,) all the military, civil and judicial powers exercised by the then existing government of the same, shall be vested in such person or persons, and shall be exercised in such manner as the President of the United states shall direct, for the maintaining and protecting the inhabitants of Louisiana, in the free enjoyment of their liberty, property and religion; and the President of the United states, has by his commission, bearing date the same 31st day of October, invested me with all the powers, and charged me with the several duties heretofore held and exercised by the Governor General and Intendant of the Province:

I HAVE therefore thought fit to issue this my PROCLAMATION making known the premises, and to declare that the government heretofore exercised over the said Province of Louisiana, as well under the authority of Spain as of the French republic, has ceased, and that of the United states of America is established over the same; that the inhabitants thereof will be incorporated in the union of the United states, and admitted as soon as possible, according to the principles of the Federal Constitution, to the enjoyment of all the rights, advantages and immunities of citizens of the United states; that in the mean time they shall be maintained and protected in the free enjoyment of their liberty, property, and the religion which they profess; that all laws and municipal regulations which were in existence at the cessation of the late government, remain in full force, and all civil officers charged with their execution, except those whose powers have been specially vested [illegible] so such officers as have been entrusted with the collection of the revenue are continued in their functions during the pleasure of the governor for the time being, or until provision shall otherwise be made.

And I do hereby exhort and enjoin all the inhabitants and other persons within the said Province, to be faithful and true in their allegiance to the United states, and obedient to the laws and authorities of the same, under full assurance that their just rights will be under the guardianship of the United states, and will be maintained from all force or violence from without or within.

In testimony whereof I have hereunto set my hand.

Given at the City of New-Orleans the 20th day of December 1803, and of the Independence of the United states of America the 28th.

William C. C. Claiborne.

Par son Excellence
Guillaume C. C. Claiborne,
Gouverneur du Territoire du Mississipi, exerçant les Pouvoirs de Gouverneur Général, et Intendant de la Province de la Louisiane.

Signé, Guillaume C. C. Claiborne.

Por el Senor,
Don Guillermo C. C. Claiborne,
Gobernador del Territorio del Missisippi exerciendo los Poderes de Gobernador General é Intendente de la Provincia de la Luisiana.

Dado en la ciudad de la Nueva Orleans el dia 20 de Diciembre de 1803 y año 28 de la Independencia de los Estados Unidos de America.

= Guillermo C. C. Claiborne.

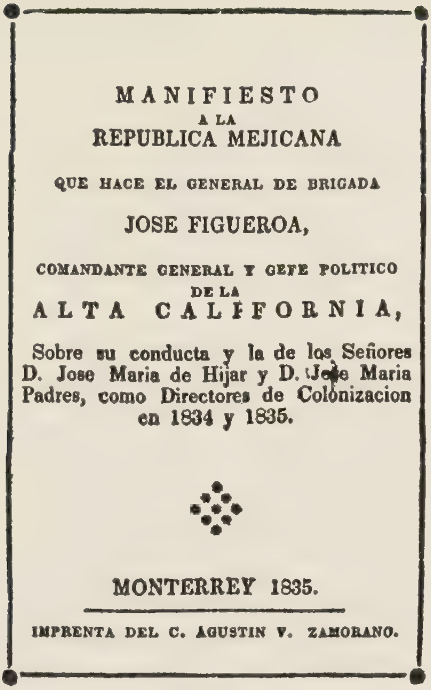
Proclamation in three languages issued from the Press of the *Moniteur de la Louisiane* in 1804, immediately after the United States Government took over the Territory of Louisiana.

although it was removed to Little Rock when that town became the state capital.

A juvenile, this time called *The Child's Book*, was the initial publication in still another state, Oklahoma, which when the book was printed was known as Indian Territory. The Reverend Samuel A. Worcester from New Echota, Georgia, where he had once been a missionary among the Cherokee Indians, was the printer, and the place was Union Mission, where Mr. Worcester arrived in 1835 with the printing outfit that had done duty in Georgia. Two newspapers, *The Cherokee Messenger* and *The Cherokee Advocate*, were started in 1844.

Printing in California was begun by Spaniards or Mexicans. The name of the first printer is unknown, although a specimen of his work, a proclamation, has been preserved. The second was Augustin Vicente Zamorano, who went from Florida to California and began to print in 1834. The first printing in English was that done at Monterey by the Reverend Walter Cotton, Chaplain of the United States frigate *Congress*, assisted by a printer named Robert Semple. Together they produced on August 15, 1846, a small newspaper, *The Californian*.

A proclamation issued by the incoming Governor, Perez, dated June 26, 1835, is the earliest known product of New Mexico's Press. It bears the imprint, "Printing office of Ramon Abreu in charge of Jesus Maria Baca." The territory's first newspaper was *El Crepusculo* ("The Dawn"), started at Taos on



MANIFIESTO
A LA
REPUBLICA MEJICANA

QUE HACE EL GENERAL DE BRIGADA

JOSE FIGUEROA,

COMANDANTE GENERAL Y GEFE POLITICO
DE LA
ALTA CALIFORNIA,

Sobre su conducta y la de los Señores D. Jose Maria de Hijar y D. Jose Maria Padres, como Directores de Colonizacion en 1834 y 1835.

◆

MONTERREY 1835.

IMPRENTA DEL C. AGUSTIN V. ZAMORANO.

Title page of the first book printed in California.

November 29, 1835, J. M. Baca printer and Padre Martinez editor.

The first printer in Kansas was Jotham Meeker, a Baptist missionary, who haled from Ohio. At a place called Shawnee Mission he printed in 1834 an alphabet in three Indian languages. The next year he founded *The Shawanoe Sun*, the first newspaper in the West to be printed exclusively in an Indian language.

Iowa's first printing press was set up in what is now the city of Dubuque by John King, a mine owner, who employed William Carey Jones, a young printer from Ohio, to operate it. On it was printed on May 11, 1836, the first number of *The Dubuque Visitor*, the name of which was changed in 1837 to *The Iowa News* and in 1841 to *The Miner's Express*.

Oregon began its printing with a newspaper, *The Spectator*, started at Oregon City in 1846. Colonel William G. T'Vault was editor and John Fleming printer. An unabridged edition of Webster's *Elementary Spelling Book*, printed in 1847 in the *Spectator* plant, was the first book in English to be issued on the Pacific Coast.

Once more a juvenile, a book in an Indian language, the dialect spoken by the Nez Perce tribe, became the first product of the printing press in a state, this time the State of Idaho. E. O. Hall brought the outfit as a present from the first native Press of Honolulu to the mission at Lapwai, in the Clearwater district, and it is preserved as a relic in the State Capitol at Salem, Oregon, the district having been at that time a part of Oregon Territory. With it was printed in 1848 *The Oregon American and Evangelical Unionist*, edited by J. S. Griffin.

In the home of the Historical Society of Minnesota is preserved the printing press on which was produced the first work done in that state, *The Minnesota Pioneer*, started in St. Paul in 1849 by James Goodhue. It is still published as *The Pioneer Press*.

The Deseret News, still published, was Utah's first contribution to the history of American printing. It was started on June 15, 1850, with Brigham Young publisher, Dr. Willard Richards editor, and Horace K. Whitney printer, the latter having as his assistant Brigham H. Young, nephew of the Mormon leader, who had had some training in printing.

Printing was begun in what is now the State of Washington at Olympia in 1852. On an old Ramage press which had done duty in both California and Oregon was printed on September 11, 1852, the first number of *The Columbian*, published by J. W. Wiley and Thornton F. McElroy.

Two missionaries named Barnard and Spencer in 1853 took a small printing outfit to Walhalla, then known as St. Joseph, and used it there for a time, thus being the first to print in what is now the State of North Dakota. The missionaries moved on to the Northwest, taking their printing outfit with them, and twenty years elapsed before they had a successor. In 1873 Colonel Clement A. Lounsberry went from Minneapolis to Bismarck, where he issued on July 6 the first number of *The Tribune*. It is still published and boasts that it has never missed an issue.

Nebraska's printing began with a newspaper, *The Nebraska Palladium*, the earliest numbers of which were printed across the Missouri River in St. Mary's, Iowa. Beginning with the issue for November 15, 1854, it was printed in Bellevue, Nebraska. Daniel E. Reed and J. M. Latham were the editors and Thomas Morton the printer of the paper.

The first printing done in Nevada of which there is authentic record was a newspaper, *The Territorial Enterprise*, begun at Genoa in 1858 by William L. Jernegan and Alfred Jones. The paper was moved in 1859 to Carson City and in 1860 to Virginia City, where in 1861 it had as a member of its editorial staff Samuel L. Clemens ("Mark Twain").

An election notice dated September 20, 1858, was the first printing done in South Dakota. Samuel J. Albright, its printer, started *The Dakota Democrat* at Sioux Falls City on July 2, 1859. Albright returned to the East in 1860. The paper was discontinued but later revived by I. W. Stewart as *The Northwestern Democrat*.

Arizona's first printing was also a newspaper, *The Arizonian*, started at Tubac in 1859. The paper was owned by the Salero Mining Company. The printers were two brothers named Wrightson, and the editors were Colonels Edward Cross and Charles D. Posten.

Two newspapers were started in Colorado, then known as Jefferson Territory, in 1859. One of these, *The Cherry Creek Pioneer*, John Merrick publisher, succumbed after one issue, but the other, *The Rocky Mountain News*, which was started by William N. Bycos and Thomas Gibson, survived and is still published at Denver, which was first called Auraria.

John Buchanan, previously of St. Louis, heads the list of printers in Montana. Associated with him was M. M. Manner. Buchanan started *The Montana Post* at Virginia City in 1864. After printing two numbers he sold out to D. W. Tilton and Benjamin R. Dittes.

Wyoming's printing began in 1867, in which year three newspapers were started at Cheyenne. They were *The Star*, which suspended in a year; *The Argus*, which lasted about two years; and *The Leader*, permanently established by Nathan A. Baker and J. E. Gates.

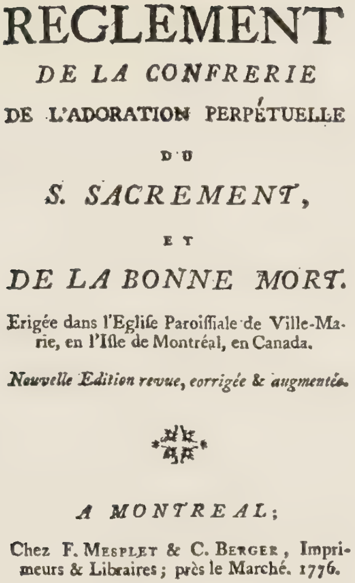
CHAPTER XIX

THE FIRST PRINTERS IN CANADA, GREENLAND, AND ALASKA

CANADA'S first printer of whom an authentic record has come down to us was an American, John Bushell, of Boston. He went to Halifax, Nova Scotia, and started a newspaper, *The Gazette*, early in 1752. Bushell had been preceded to Nova Scotia by about a year by Bartholomew Green, a printer previously in partnership with him in Boston, who died prior to Bushell's arrival. Green probably printed in Canada and if so is entitled to a place in history as the first Canadian printer, but the fact that he did so has never been definitely established.

The first printing in what is now the Province of Quebec was also the work of printers from the American Colonies. William Brown and Thomas Gilmore established *The Quebec Gazette* on June 21, 1764.

Montreal's pioneer printer was a native of France, Fleury Mesplet, who arrived *via* England and America in 1776. Mesplet's advent in Montreal was almost coincident with that of the American Commissioners who went to obtain Canadian support of the cause of the Colonies against Great Britain. The mission failed, but Mesplet remained in Montreal when the commission returned. His first book was *Règlement de la Confrérie de l'Adoration Perpétuelle*, dated March,



REGLEMENT
DE LA CONFRERIE
DE L'ADORATION PERPÉTUELLE
DU
S. SACREMENT,
ET
DE LA BONNE MORT.

Erigée dans l'Egliſe Paroiſſiale de Ville-Marie, en l'Iſle de Montréal, en Canada.

Nouvelle Edition revue, corrigée & augmentée.

⁂

A MONTREAL;

Chez F. Mesplet & C. Berger, Imprimeurs & Libraires; près le Marché. 1776.

Title page (full size of the first book printed in Montreal, Canada

1776. An earlier edition was printed by him in Philadelphia. He started with it to Canada but lost practically all of it through the upsetting of a boat in the rapids of Chambly.

While New Brunswick was still included in Nova Scotia, a newspaper was established at St. John, the present capital of the province. The year was 1783, when Lewis and Ryan began publication of *The St. John's Gazette and Nova Scotia Intelligencer.*

James Robertson set up a printing plant in Prince Edward Island in 1787, becoming the first printer in that province. Robertson was born and died in Scotland. Coming to America in 1764, he roamed over a good part of the colonies on the continent and in the West Indies, publishing newspapers in six or seven places. He began *The Royal American Gazette and Intelligencer* in Prince Edward Island (then called St. John's Island) in 1787.

Ontario's pioneer printer was a French Canadian named Louis Roy. In 1793 he established *The Upper Canada Gazette, or American Oracle*, at Niagara, then called Newark.

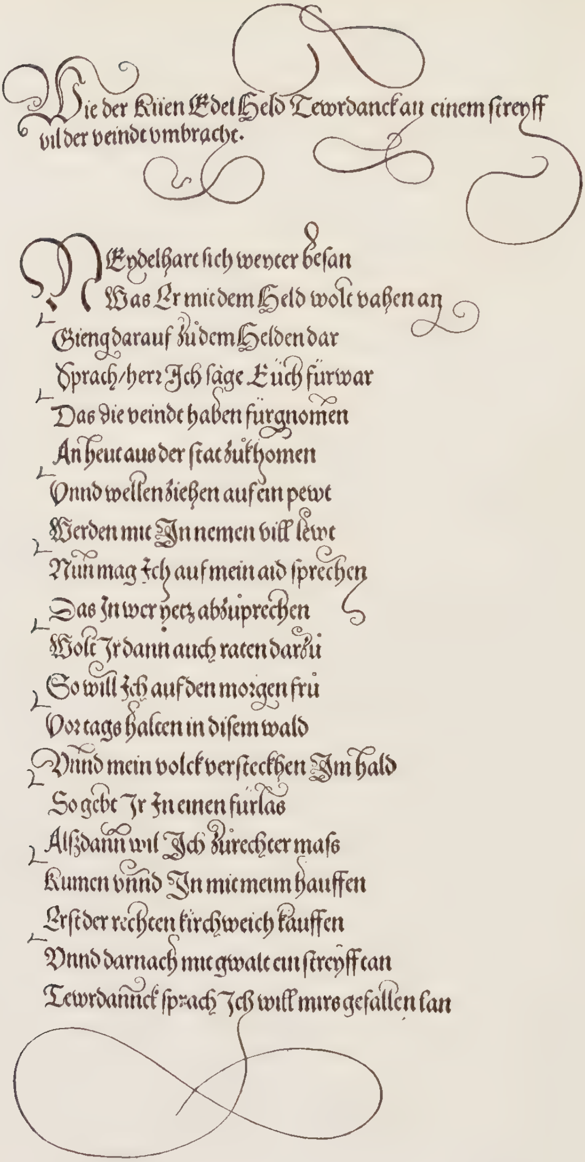
A Hudson's Bay Company trading post known as Norway House, four miles north of the present city of Winnipeg, was the scene of the first printing operations in western Canada. James Evans, a Wesleyan missionary, who made his own type, ink, and printing press, commenced to print there about 1840. William Buckingham and William Coldwell, two Toronto newspaper men who had come into the district by way of St. Paul, started *The Nor' Wester* at Fort Garry, on Lake Winnipeg, in 1859.

British Columbia's first printing was produced by a missionary, Bishop Demers, assisted by a French adventurer named Comte de Garro. They established a newspaper in Victoria, but few details are known about it. Their outfit passed into the hands of a Nova Scotian named Smith, who had his name changed by act of the legislature to the more romantic appellation of Amor de Cosmos ("lover of the universe"), and in 1858 he established *The British Colonist* so firmly that it is still published.

Printing began in the far Northwest, now divided into the two provinces of Alberta and Saskatchewan, in 1878. P. G. Laurie started *The Saskatchewan Herald* in Battleford in that year, and Frank Oliver followed with *The Bulletin* in Edmonton in 1880.

Greenland's first printing was done, appropriately, in Eskimo. Henry Rink, head of the Danish mission at Godthaab, began to print there in 1857.

Printing in Alaska was done by the Russians before American ownership, but no particulars are known. *The Alaska Times*, started at Sitka on May 1, 1868, by W. S. Dodge with T. G. Murphy as editor, was the first newspaper in English to be established in the territory.



Wie der Küen Edel Held Tewrdanck an einem ſtreyff vil der veindt vmbracht.

NEydelhart ſich weyter beſan
Was Er mit dem Held wolt vahen an
Gieng darauf zů dem Helden dar
Sprach/ herr Jch ſäge Euch fürwar
Das die veindt haben fürgnomen
An heut aus der ſtat zůkhomen
Vnnd wellen ziehen auf ein pewt
Werden mit Jn nemen vill lewt
Nun mag Jch auf mein aid ſprechen
Das Jn wer yetz abzůprechen
Wolt Jr dann auch raten darzů
So will Jch auf den morgen frů
Vor tags halten in diſem wald
Vnnd mein volck verſteckhen Jm hald
So gebt Jr Jn einen furlas
Alſzdann wil Jch zůrechter maſs
Kumen vnnd Jn mit meim hauffen
Erſt der rechten kirchweich kauffen
Vnnd darnach mit gwalt ein ſtreyff tan
Tewrdannck ſprach Jch will mirs gefallen lan

Page from *Tewrdannckh.* Printed by Hans Schönsperger, Nuremberg, 1517.

CHAPTER XX

FINE PRINTING

THE title of this chapter has been chosen with full appreciation of the fact that the word "fine" has been so overworked as to have lost some of its once altogether estimable significance. In literary terminology, for instance, by "fine writing" is meant diction that is overrefined, in which more attention is given to the manner than to the message. Notwithstanding the measure of disfavor into which the word has fallen, however, I persist in its use, for the reason that no other exactly expresses the kind of printing to which the chapter will be devoted.

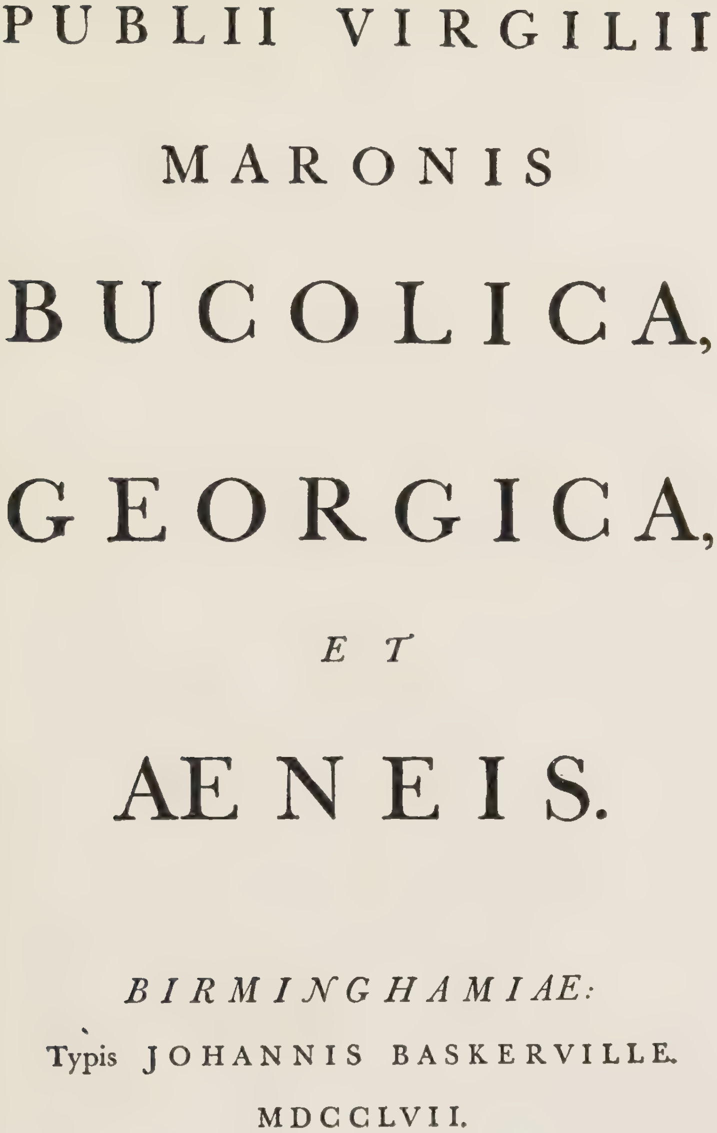
Throughout the nearly five hundred years of the printing art there have been many printers whose work reached a high level of quality, and occasionally, but only occasionally, there have appeared some who produced printing that rose above this level of excellence to a degree that gives it a special distinction.

The early printers labored with crude equipment. The minutely exact adjustment of the modern steel printing machine, which makes close register, uniform ink distribution, and even impression possible, was entirely absent from their weakly constructed wooden presses. Ink distribution was done by hand, with inking balls covered with leather, hair side in; and as the types were cast on a haphazard system, there was no certainty of an even surface from which to make impressions. Notwithstanding such unfavorable conditions, some printers did achieve close register, an even and adequate distribution of ink, and a uniform impression which did not show on the reverse side of the sheet and yet "bit" into the surface of the paper in a manner that makes these pages still a joy to look upon.

Witness, for instance, the famous book entitled *Tewrdannckh*, printed for the Emperor Maximilian I of Germany in 1517. The work, which was written in poetic form, was intended to celebrate the journey the Emperor made to Ghent in 1477, when he was but eighteen years of age, to become the husband of Mary of Burgundy. It is said that he wrote part of it and that he made some of the numerous drawings for it, but the latter statement does not receive any general acceptance, one writer going so far as to say that Maximilian never drew anything but a sword.

The Emperor's private secretary, Melchior Pfintzing, did most of the literary work, and Vincenz Röckner designed the type face, which is notable because of the extraordinary flourishes of some of the letters. Hans Schönsperger of Augsburg, who had achieved a reputation for fine printing, was selected as the printer. He printed the first edition in Nuremberg in 1517 and a second in Augsburg in 1517.

The pages measure 9¼ × 12⅞ inches in size. One hundred and eighteen magnificent woodcuts are shown in the volume. Copies were printed both on paper



PUBLII VIRGILII

MARONIS

BUCOLICA,

GEORGICA,

ET

AENEIS.

BIRMINGHAMIAE:

Typis JOHANNIS BASKERVILLE.

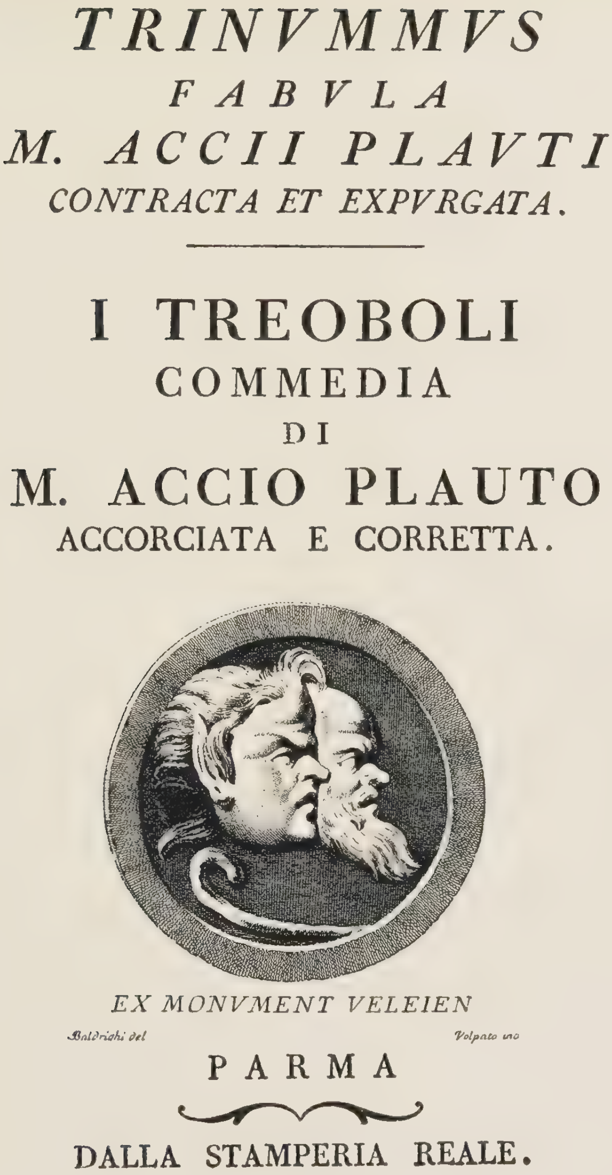
MDCCLVII.

Characteristic title page by John Baskerville, Birmingham, 1757.

and on vellum, and in some the engravings were elaborately colored by hand. The uncolored paper copies are the most satisfying. Although printed more than four centuries ago, the opinion of the experts was for a long time divided as to whether the letterpress of the volume was printed from individually cast types or from engraved wooden blocks. Papillon, the engraver, and Fournier, the type-founder, than whom there have been no greater authorities in either field, agreed that engraved blocks and not types were used, but other well-informed writers have not accepted their judgment as final. Dibdin was a believer in the type theory, and Updike says that an inverted "i" on one of the pages proves the theory's correctness. William M. Ivins, Jr., calls attention to the fact that the same type was used in a Prayer Book.

Tewrdannckh was the first great privately printed book. Maximilian evidently valued the volumes so highly that he could not bear to part with them, for he boxed them up in six chests and stored them away. He died in 1519, and it was not until seven years later that they were finally distributed. Later editions were printed by several printers at different places, and the book has twice been completely reproduced in facsimile.

It is only his production of the *Tewrdannckh* that admits Hans Schönsperger to mention in this chapter. The greatest printer of the fifteenth century, Aldus Manutius of Venice, claims admission also by reason of a single volume, the celebrated *Hypnerotomachia*



TRINVMMVS
FABVLA
M. ACCII PLAVTI
CONTRACTA ET EXPVRGATA.

I TREOBOLI
COMMEDIA
DI
M. ACCIO PLAUTO
ACCORCIATA E CORRETTA.

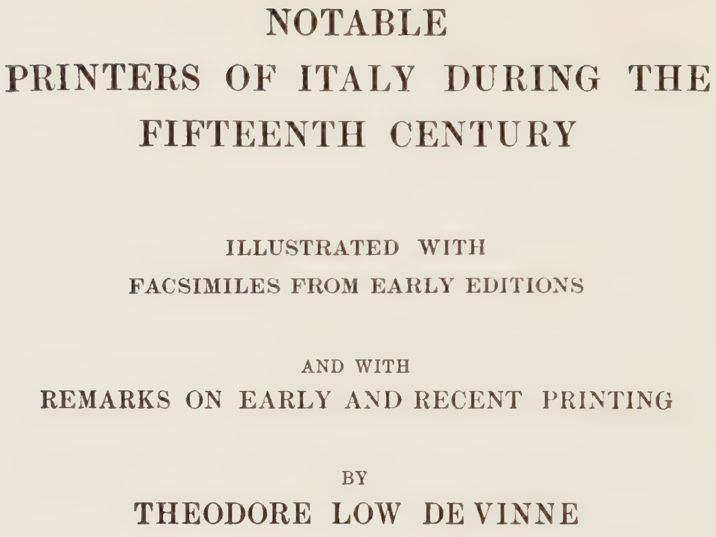
EX MONVMENT VELEIEN

Baldrighi del
Volpato inc

PARMA

DALLA STAMPERIA REALE.

Title page by Giambattista Bodoni, Parma, 1780.



NOTABLE
PRINTERS OF ITALY DURING THE
FIFTEENTH CENTURY

ILLUSTRATED WITH
FACSIMILES FROM EARLY EDITIONS

AND WITH
REMARKS ON EARLY AND RECENT PRINTING

BY
THEODORE LOW DE VINNE

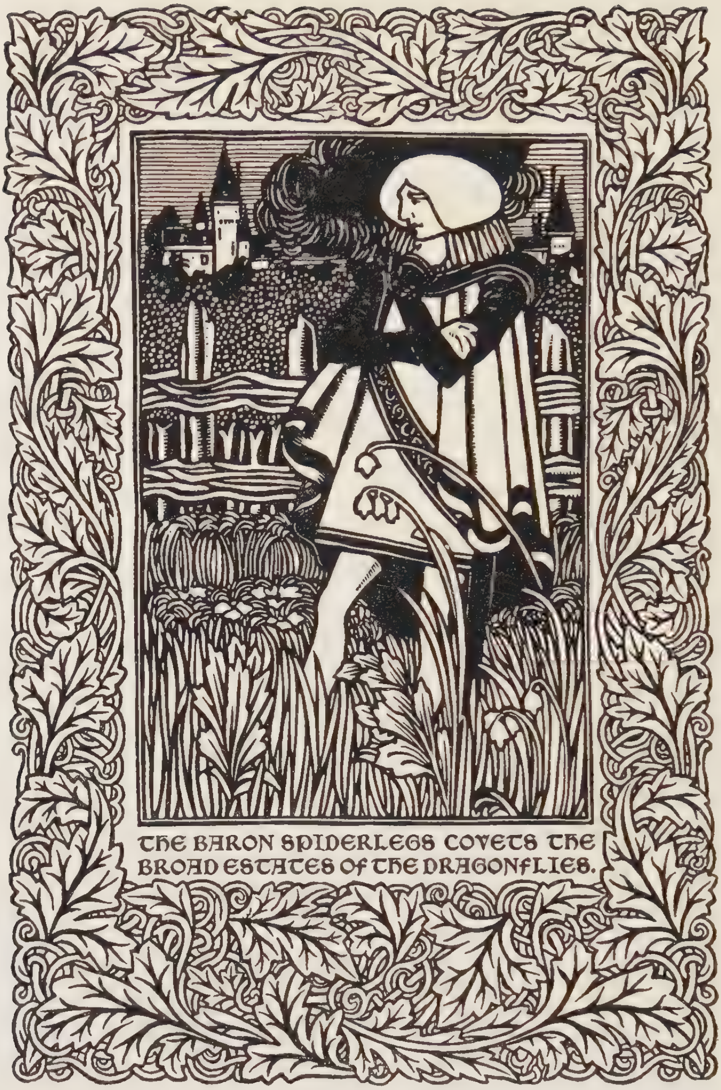
NEW YORK
THE DE VINNE PRESS
1910

A De Vinne title page of 1910. The book was published by the Grolier Club. This page is from one of a few copies which De Vinne printed for private distribution.

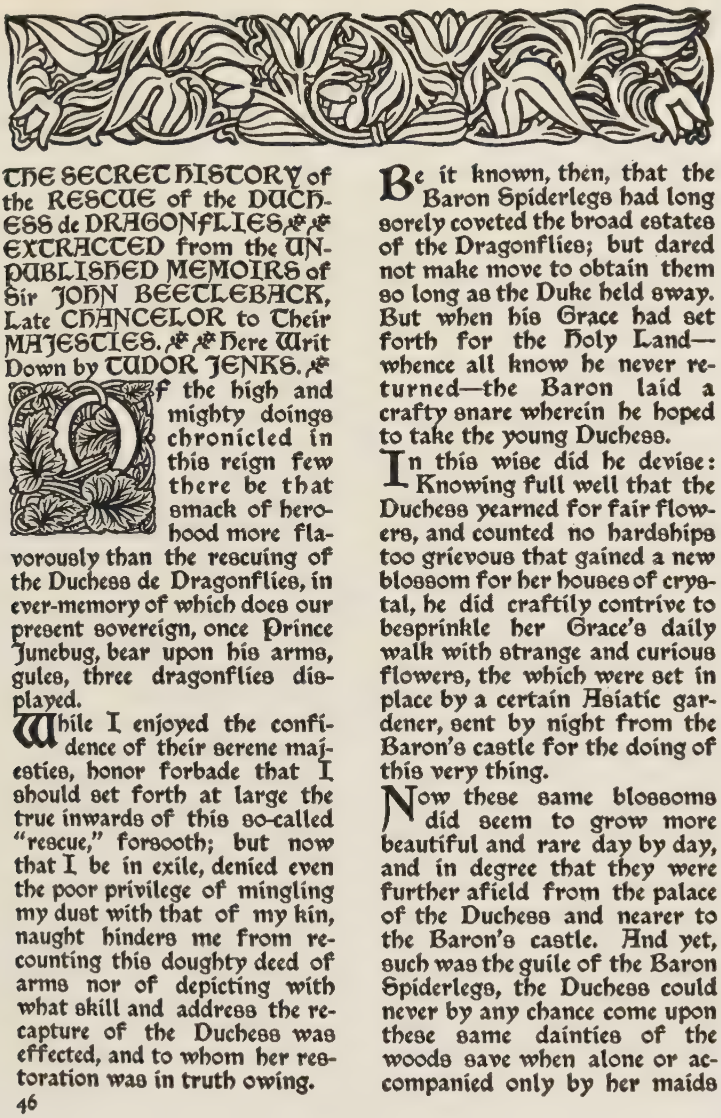
Poliphili, already referred to in an earlier chapter and because of its many fine illustrations to be further considered later. There were others who produced occasional volumes of great excellence which have been preserved as typographical monuments. Of the great pioneers of the art, Peter Schoeffer, Zainer, Ratdolt, Jenson, to mention only a few, all were good printers, but their work does not rise sufficiently above the common level to justify inclusion here. The same is true of Plantin, Estienne, Elzevir, Didot—all great names in the printing history of the sixteenth, seventeenth, and eighteenth centuries, but it is not considered that their work comes within the scope of this chapter. The latter half of the sixteenth and the whole of the seventeenth century were nearly barren of fine printing.

The eighteenth century brought forth no printer of eminence until the advent of John Baskerville, who produced his first book, a quarto edition of Virgil, in 1757. Baskerville began his career as a writing master. When he became a printer, he designed the type faces he used and manufactured the paper upon which he printed. His typography was severely plain: with one exception there is almost no ornamentation in any of his books. His Italic letter is said by Plomer to be "unquestionably the most beautiful type that had ever been seen in England."

As the eighteenth century entered its last quarter there appeared in the typographic firmament in Italy a new star of the very first magnitude, Giambattista


THE BARON SPIDERLEGS COVETS THE
BROAD ESTATES OF THE DRAGONFLIES.

Decorative page from *Bradley, His Book*. Drawn and printed by Will Bradley at the Wayside Press, Springfield, Massachusetts, 1896.



THE SECRET HISTORY of the RESCUE of the DUCHESS de DRAGONFLIES ❧ ❧ EXTRACTED from the UNPUBLISHED MEMOIRS of Sir JOHN BEETLEBACK, Late CHANCELOR to Their MAJESTIES. ❧ ❧ Here Writ Down by TUDOR JENKS. ❧

Of the high and mighty doings chronicled in this reign few there be that smack of herohood more flavorously than the rescuing of the Duchess de Dragonflies, in ever-memory of which does our present sovereign, once Prince Junebug, bear upon his arms, gules, three dragonflies displayed.

While I enjoyed the confidence of their serene majesties, honor forbade that I should set forth at large the true inwards of this so-called "rescue," forsooth; but now that I be in exile, denied even the poor privilege of mingling my dust with that of my kin, naught hinders me from recounting this doughty deed of arms nor of depicting with what skill and address the recapture of the Duchess was effected, and to whom her restoration was in truth owing.

Be it known, then, that the Baron Spiderlegs had long sorely coveted the broad estates of the Dragonflies; but dared not make move to obtain them so long as the Duke held sway. But when his Grace had set forth for the Holy Land—whence all know he never returned—the Baron laid a crafty snare wherein he hoped to take the young Duchess.

In this wise did he devise: Knowing full well that the Duchess yearned for fair flowers, and counted no hardships too grievous that gained a new blossom for her houses of crystal, he did craftily contrive to besprinkle her Grace's daily walk with strange and curious flowers, the which were set in place by a certain Asiatic gardener, sent by night from the Baron's castle for the doing of this very thing.

Now these same blossoms did seem to grow more beautiful and rare day by day, and in degree that they were further afield from the palace of the Duchess and nearer to the Baron's castle. And yet, such was the guile of the Baron Spiderlegs, the Duchess could never by any chance come upon these same dainties of the woods save when alone or accompanied only by her maids

46

Type page from *Bradley, His Book.*

Bodoni, the most distinguished printer of the century. Bodoni was born at Saluzzo in 1740, the son of a printer. He went to Rome at the age of eighteen and secured a position in the printing house of the Congregation of the Propaganda, where he attracted the attention of Cardinal Spinelli, its head, who became his patron and who aided him in obtaining an education, particularly in languages. He went to Parma in 1768 as director of the Stamperia Reale, a Press modeled on that of the Louvre in Paris. Bodoni in 1788 became head of a Press established in the palace of the Duke of Parma. He died at Parma in 1813.

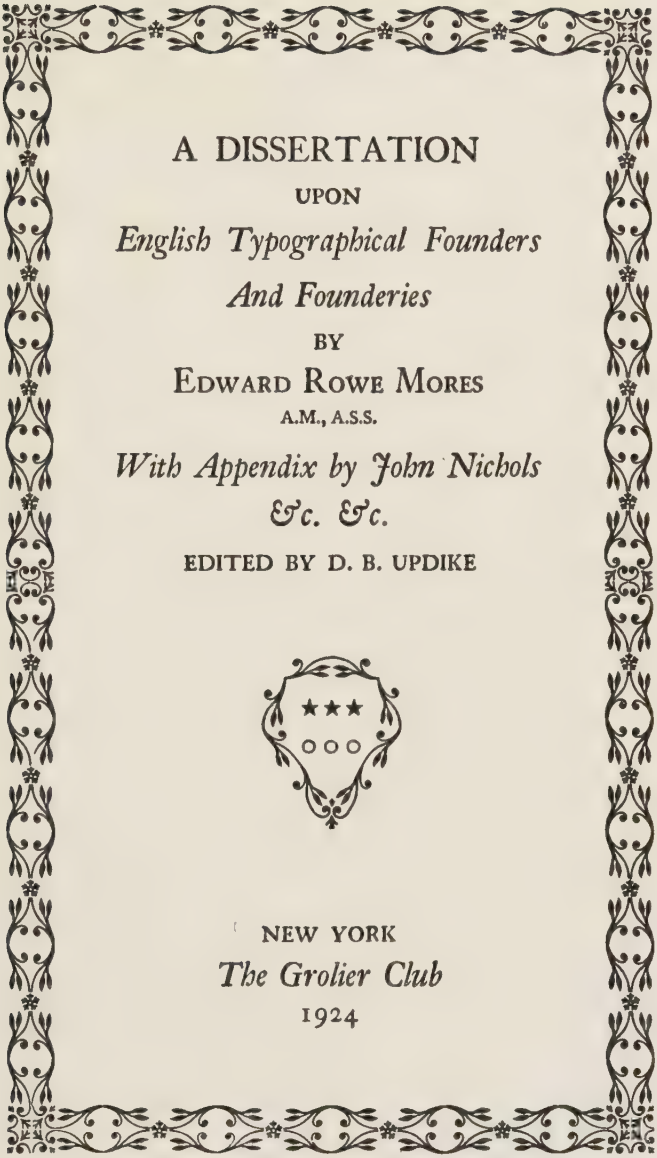
Bodoni was the first printer on the Continent to make lavish use of white space. His work was divided into two periods. The first is decorative and the second plain. His later books, which were printed from type of his own design, contained little ornamentation and were seldom illustrated. It cannot be said, in modern advertising phraseology, that to him paper was a part of the picture, but he made use of spacing between lines and wide margins to a degree that excited praise and emulation. His later work was like Baskerville's in that it was severely plain, but differed from it in another respect in that he profited financially by it. During the period of French rule in Italy Bodoni attracted the attention of Napoleon Bonaparte, who gave him a pension of 3,000 francs and on another occasion a present of 18,000 francs. He received the Cross of the Two Sicilies from Murat and nomination as Chevalier de la Réunion from Napoleon.

The contributions to fine printing of the English printers William Bulmer and the Whittinghams, uncle and nephew, have been reviewed in an earlier chapter. They undoubtedly exercised a beneficial influence upon English printing, as did also private presses like Strawberry Hill and Lee Priory, but it was not sufficient to stay the downward tendency that the art steadily manifested. The most depressing period came as the nineteenth century was drawing to a close, but it happily proved to be the darkness that always just precedes a dawn. The change was brought about by the group of great craftsmen headed by William Morris, operating at the Kelmscott Press, and Emery Walker and T. J. Cobden-Sanderson at the Doves Press, to which we shall refer again. The work of these three men and others associated with them brought about a complete renaissance in printing in England which was eventually reflected throughout the world. Not all printing done since they showed the way is good, but neither is it all bad, as was largely the case, particularly in England and America, just before their entrance upon the scene.

Turning to America, we find the seventeenth and eighteenth centuries destitute of printers renowned for the fine quality of their productions. There were great American printers like Benjamin Franklin and Isaiah Thomas of Boston and Worcester. Franklin was the best printer of his time; Thomas had a large output and printed some creditable books; but the productions of neither are treasured in the great book collections as examples of fine printing. Franklin and Thomas were great because of things other than the quality of their printing.

The nineteenth century produced the first American printer to exercise very much of an influence upon the art. He was Theodore Low De Vinne, born at Stamford, Connecticut, on December 25, 1828. In 1850 De Vinne became connected with Francis Hart in New York, to the ownership of whose business he later succeeded. From the point of view of craftsmanship De Vinne was greater as a pressman than as a compositor. He was not a designer of fine printing in the modern sense of the term. His was a period of transition in both these departments, but particularly in presswork. The cylinder press was just winning a reluctant recognition, and soon after came the halftone with its demand for coated paper and hard packing in make-ready. Frederic E. Ives, the inventor of the halftone process, gives a good description of the situation in a recent communication: "When I demanded of a printer of more than local reputation that in printing my halftone process plates he should use a hard surface paper, a tympan, and fine ink with double distribution, he asked me if I really thought that the ancient and honorable art of printing would ever be modified by anything which I could do?"

De Vinne did not resist the new conditions. On the contrary, he adapted himself to them and worked out the problems with a skilful craftsmanship that brought forth the best results. Although not a type



A DISSERTATION
UPON
English Typographical Founders
And Founderies
BY
EDWARD ROWE MORES
A.M., A.S.S.
With Appendix by John Nichols
&c. &c.
EDITED BY D. B. UPDIKE

NEW YORK
The Grolier Club
1924

Title page by Daniel Berkeley Updike. Printed at the Merrymount Press, Boston, 1924.

designer, he had ideas about the shapes of letters. A series named after him, but which he did not design, had a considerable vogue, as did also another called Century Roman, made for the *Century* magazine, with the design of which he had a good deal to do. He was responsible also for the face known as the Renner, modeled on the Roman of the sixteenth-century Italian printer of that name.

De Vinne did service to the printing industry in two other ways: one was in the promotion of organization, and the other was through his authorship of many books relating to both the historical and the practical phases of the art. He played a large part in founding both the Typothetae and the Grolier Club and helped to guide the destinies of these organizations through many years. Several of his books are still selling as steadily as when he wrote them a quarter of a century ago. He died in 1912.

Daniel Berkeley Updike has produced at the Merrymount Press of Boston, Massachusetts, which he established in 1893, a long list of books and other printed matter of probably a higher level of all-round typographic excellence than can be credited to any other printer with a similar output. Throughout his third of a century of printing experience Updike has pursued an independent course. He has done the things he wanted to do and most of them in the way he wanted to do them; and as a consequence they will endure. He, too, has made a notable contribution to the literature of the printing art in his *Printing*

THE PASSPORTS

Printed by

BENJAMIN FRANKLIN

at his Paſsy Preſs

ANN ARBOR

THE WILLIAM L. CLEMENTS LIBRARY

1925

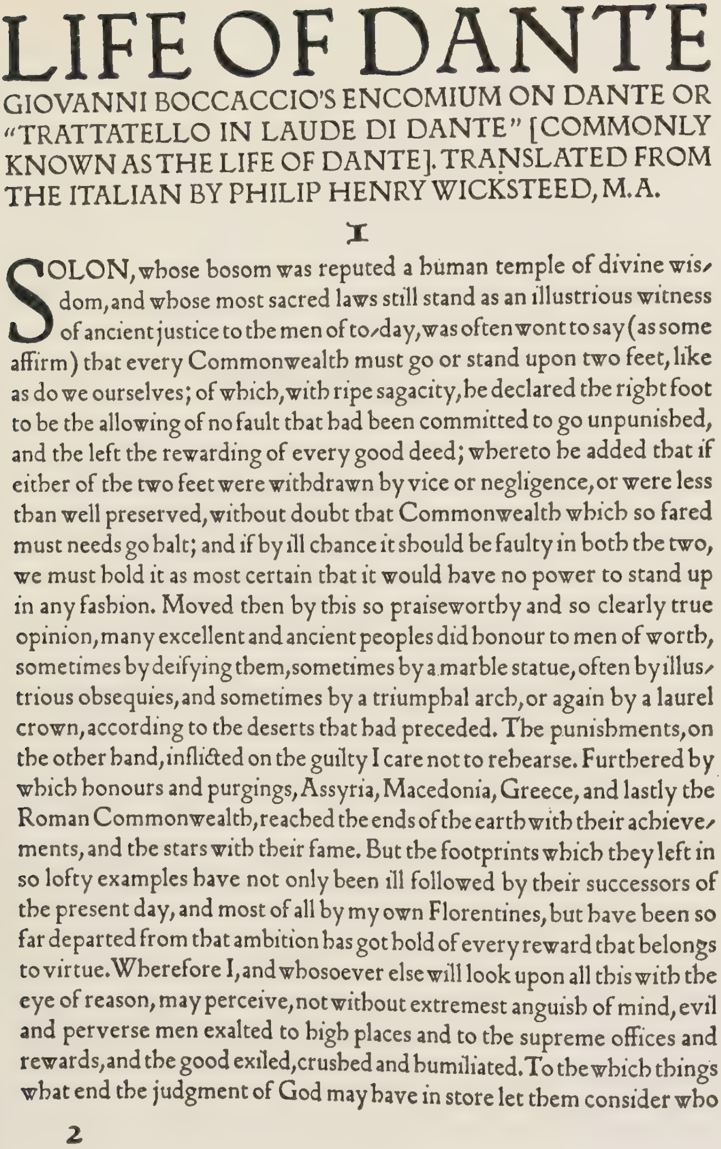
A Bruce Rogers title page. Printed at the Riverside Press, Cambridge, Massachusetts, 1925.

Types, Their History, Forms, and Use, the most authoritative work on the subject.

No other present-day books are so eagerly sought by collectors as those designed by Bruce Rogers. Rogers has never owned a printing plant. He became associated in 1900 with the Riverside Press at Cambridge, Massachusetts, where many beautiful editions were issued under his supervision. In 1917 he went to England, where for a time he joined Emery Walker and later the Cambridge University Press. He is now connected with William Edwin Rudge at Mount Vernon, New York.

Frederic W. Goudy's work has been principally in the field of type design, more than sixty different faces having come from his hand so far. Only limitations of time have stood in the way of his doing fine printing. With Will Ransom, Goudy established the Village Press at Park Ridge, a suburb of Chicago, in 1903. In 1904 he removed to Hingham, Massachusetts, and two years later to New York. A fire destroyed his printing outfit in 1908. Three years later he re-established the Village Press, and in the same year he brought out the popular Kennerley type. The Village Press was later removed to Forest Hills, Long Island, and still later to its present home in Marlborough, New York. Goudy is assisted in his typographic work by his wife, Bertha Goudy, who is also an exceedingly capable printer.

There are several other recent or contemporary English and American printers whose names should



LIFE OF DANTE

GIOVANNI BOCCACCIO'S ENCOMIUM ON DANTE OR
"TRATTATELLO IN LAUDE DI DANTE" [COMMONLY
KNOWN AS THE LIFE OF DANTE]. TRANSLATED FROM
THE ITALIAN BY PHILIP HENRY WICKSTEED, M.A.

I

SOLON, whose bosom was reputed a human temple of divine wisdom, and whose most sacred laws still stand as an illustrious witness of ancient justice to the men of to-day, was often wont to say (as some affirm) that every Commonwealth must go or stand upon two feet, like as do we ourselves; of which, with ripe sagacity, he declared the right foot to be the allowing of no fault that had been committed to go unpunished, and the left the rewarding of every good deed; whereto he added that if either of the two feet were withdrawn by vice or negligence, or were less than well preserved, without doubt that Commonwealth which so fared must needs go halt; and if by ill chance it should be faulty in both the two, we must hold it as most certain that it would have no power to stand up in any fashion. Moved then by this so praiseworthy and so clearly true opinion, many excellent and ancient peoples did honour to men of worth, sometimes by deifying them, sometimes by a marble statue, often by illustrious obsequies, and sometimes by a triumphal arch, or again by a laurel crown, according to the deserts that had preceded. The punishments, on the other hand, inflicted on the guilty I care not to rehearse. Furthered by which honours and purgings, Assyria, Macedonia, Greece, and lastly the Roman Commonwealth, reached the ends of the earth with their achievements, and the stars with their fame. But the footprints which they left in so lofty examples have not only been ill followed by their successors of the present day, and most of all by my own Florentines, but have been so far departed from that ambition has got hold of every reward that belongs to virtue. Wherefore I, and whosoever else will look upon all this with the eye of reason, may perceive, not without extremest anguish of mind, evil and perverse men exalted to high places and to the supreme offices and rewards, and the good exiled, crushed and humiliated. To the which things what end the judgment of God may have in store let them consider who

2

First reading page of *Life of Dante*. Printed by John Henry Nash, San Francisco, 1922.

be mentioned in connection with fine printing: B. H. Newdigate of the Shakespeare Head Press, Stratford-on-Avon, England; George W. Jones of London; Francis Meynell of the Pelican Press, London; T. M. Cleland, Hal Marchbanks, Elmer Adler of the Pynson Printers, and the late Walter Gilliss, all of New York; Dard Hunter of Chillicothe, Ohio; William A. Kittridge of Chicago; Norman T. A. Munder of Baltimore; John Henry Nash and the Grabhorn Brothers of San Francisco; Carl Purington Rollins of New Haven; William A. Dwiggins of Boston; Frederic Warde of Princeton; and William Edwin Rudge of Mount Vernon, New York.

Two societies, the Grolier Club and the American Institute of Graphic Arts, have done much to encourage fine printing in America. The Grolier Club maintains a clubhouse in which meetings and exhibitions are held for the purpose of promoting interest in good book-making and which is the home of a splendid collection of examples of printing and books relating to every phase of the graphic arts. The Institute likewise holds meetings and exhibitions, its discussions being of a more practical and technical nature than those of the Grolier Club. One of its most useful activities is the selection annually of the "Fifty Books of the Year," which are formed into a traveling exhibition and shown in various centers throughout the United States. Several other organizations, among them the Bibliophile Society, the Club of Odd Volumes, the Medici Society, the Acorn Club, and the

Brothers of the Book, have made commendable endeavors to promote good book-making.

Porter Garnett's Laboratory Press at the Carnegie Institute at Pittsburgh is doing noteworthy work in instructing and inspiring the younger generation of fine printers, an influence which is sure to be reflected in the future of the art.

CHAPTER XXI

PRIVATE PRESSES

THERE is a diversity of opinion as to just what is meant by the term "private press." John Martin, author of *A Bibliographical Catalogue of Books Privately Printed* (1834, revised in 1854), the most important work on the subject, included only such productions "as were not intended by the writers for sale, and the circulation of which has been confined entirely to their friends and connections or to those who took an interest in the matter contained in them." Claudin's definition of a private press is "one set up in a monastery, a palace, a residence, or a private house, not the office of a printer;" and he continues: "In fact, a private press is a press reserved for personal and not for public use, patronized, held, owned, or hired for the occasion by a private person at his own house, or by a congregation in, or close to, their buildings. Whether the copies issued were merely intended for the use of an ecclesiastical order or to be presented to high personages, whether they were exposed for sale or reserved for exchange, as in the case of the books printed at the monastery of SS. Ulrich and Afra at Augsburg, makes no essential difference. The books were produced under the screw and lever of a private and not of a public press. Herein lies the difference." Accordingly Claudin classed the first printing shop established in France, the one set up in the Sorbonne with Gering, Krantz, and Freiburger at case and press, as private, a designation not commonly accepted by bibliographers. Pollard says: "For a press to be private a double qualification seems necessary: the books it prints must not be obtainable by any chance purchaser who offers a price for them and the owner must print for his own pleasure and not work for hire for other people."

This latter definition agrees with Martin's and with those of most of the bibliographers, Claudin excepted. It runs counter, however, to the classifications of private presses commonly made in that it excludes such presses as the Kelmscott, Doves, and Essex House. And it must be admitted that from some points of view they should be excluded. Their editions were offered for sale at stated prices and differed from those of the more frankly commercial publishing houses only in that they were limited.

Under any definition it must appear that William Caxton, the first English printer, becomes also the first Englishman to set up a private press. His first book, *Recuyell of the Historyes of Troye*, printed at Bruges in 1475, he tells us in the colophon, was the result of a command of the lady Margaret, Duchess of Burgundy. He intended to produce it with a pen but found his "hande wery & not steadfast myn eys dimed with overmoche lokyng on the whit paper . . . therfor I have practysed & lerned at my grete charge and dispence to ordeyne this sayd booke in prynte." He tells us also that he had promised copies to his friends; evidently there was no thought of commercialism in the transaction. Caxton's noble patroness, however, "largely rewarded" him, and this fact and his subsequent eminently successful career as printer and publisher take him out of the narrower classification of conductors of private presses.

Some classifications of private presses include the secret presses maintained during the troublous period of England's history when the Star Chamber interfered with liberty of public utterance; they include also the presses operated by rulers and other public officials from which to issue proclamations. Such presses do not fall within the scope of this chapter.

In an article contributed to *Bibliographia*, Part XI, Claudin enumerates the private presses of France during the fifteenth century. Beginning, as stated above, with the first Press set up in the Sorbonne, he lists others as follows:

Poitiers.—In the parish of Saint Hilaire-le-Grand. Patron, Bertrand de Brossa, canon, precentor, counsellor, and Master of the Rolls to the King. Printers, Jehan Bouyer and Stephen des Grez. (1479–1482.)

Metz.—Patrons and printers, Jehan Colin and Gerard de Villeneuve of the Carmelite Order. (1482.)

Chartres.—In the Canon House. Patron, Pierre Plume, canon. Printer, Jehan du Pré. (1482–1483.)

Brehan-Loudeac.—Patron, Jehan de Rohan, Lord of Du Gue de Lisle. Printers, Robin Foucquet and Jehan Cres. (1484–1485.)

Abbey of Lantenac.—Patron, Jehan de Rohan. Printer, Jehan Cres. (1487–1492.)

Embrun.—In the Archiepiscopal Palace. Patron, the archbishop. Printer, Jacques le Rouge. (1489–1490.)

Goupillières.—In the residence of a priest. Patron and printer, Michael Andrieu. (1491.)

Dijon.—In the guest house of Petits Citeaux. Patron, Jehan de Cirey, abbot of Citeaux. Printer, Peter Metlinger. (1491–1492.)

Narbonne.—In the cloister of the Cathedral of St. Just. Patron, the chapter of St. Just or the archbishop. Printer, unknown.

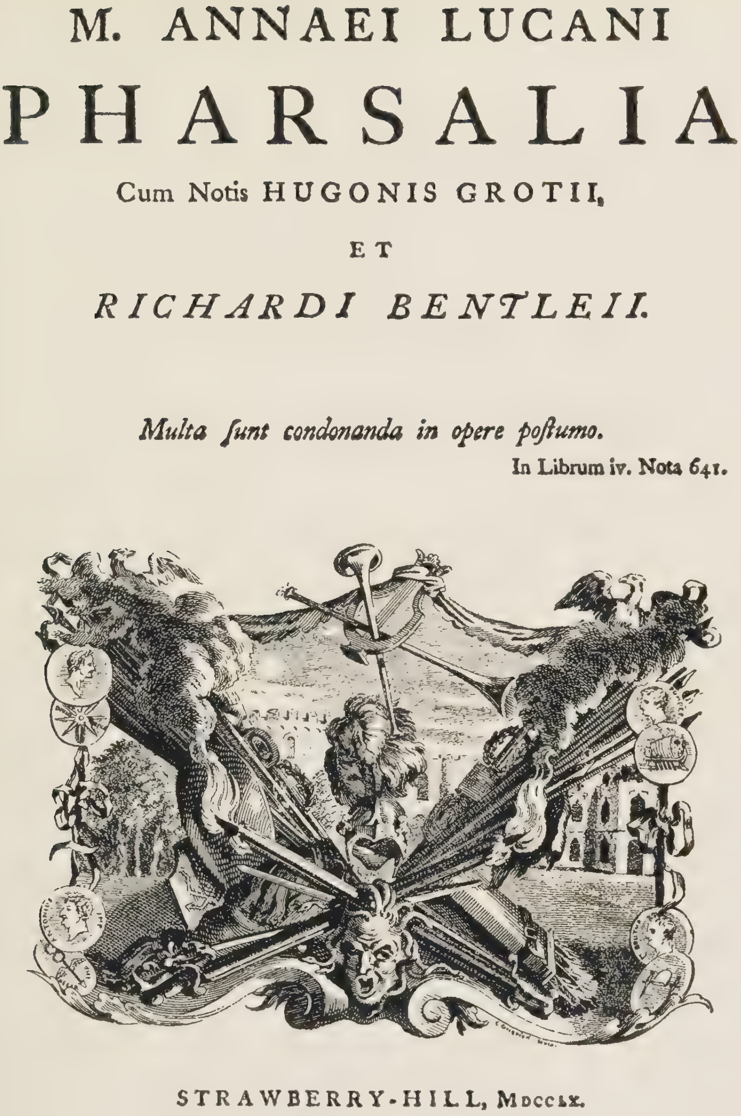
Monastery of Cluny.—In the precincts of the Monastery. Patron, Jehan d'Amboise, general of the Order of Cluny. Printer, Michael Wenssler of Basel.

French royalty had a fondness for private presses through many years. Timperley records a number of instances in support of this statement. Louis XIV, who was born in 1638, set up a Press in the Louvre from which "princely editions" of the classics were issued. Louis XV, his successor, had a small printing outfit installed for his amusement, from which, under the tutelage of an experienced printer, he issued in 1718, at the age of eight years (he succeeded to the throne when but five years old), some exercises in geography. In 1758 Madame la Dauphine established a Press in the Palace of Versailles and herself assisted in operating it. In 1760 the Duke of Burgundy, the King's brother, had a Press, and in the same year Madame de Pompadour, Louis XV's mistress, set up a Press in the Palace from which was issued a volume containing a bookplate engraved by her own hand.

A Press was established for the young prince who was afterwards to become the unhappy Louis XVI, and an edition of 25 copies of Telemachus' *Morals* is said to have been printed by him in 1766, when he was but twelve years of age.

The French private press best known in America, however, was started and maintained by an American, no less a person than our most famous printer, Benjamin Franklin. As one of the three commissioners representing the newly formed United States Government, Franklin went to France in 1776 and remained nine years. He settled at Passy, a village situated between Paris and Versailles, and it was inevitable that he should, if for no other reason than the amusement it afforded him, go back to his old vocation of printer. The "bagatelles," as they were called by William Temple Franklin, the grandson of the great American, in the single reference he makes to them in his writings, that issued from the private Press at Passy are extremely rare and therefore highly prized by collectors. The latest enumeration places their total number at 36. Benjamin Franklin, in writing of his outfit, says that it consisted of a "great variety of founts."

A private Press was set up by George II on February 15, 1731, in St. James' Palace, London, for the Duke of Cumberland and some of the princesses, and Lowndes' *Bibliographer's Manual* gives a list of the productions of a Press established by George III some time before 1809 at Frogmore, the mansion at



M. ANNAEI LUCANI

PHARSALIA

Cum Notis HUGONIS GROTII,

ET

RICHARDI BENTLEII.

Multa ſunt condonanda in opere poſtumo.

In Librum iv. Nota 641.

STRAWBERRY-HILL, MDCCLX.

A Strawberry Hill title page, 1760.

Windsor occupied by Queen Charlotte. The history of private presses in England, however, begins not with royalty's connection with the "art preservative," but with the Press established at Strawberry Hill, Twickenham, by Horace Walpole, afterwards Earl of Orford, in 1757. In a letter dated August 4 of that year Walpole said: "I am turned printer, and have converted a little cottage here into a printing office. My abbey is a perfect college or academy; I keep a painter in the house and a printer." The Press was continued for forty years, ending its career only with Walpole's death in 1797. Many meritorious works were issued, some of very considerable size. The largest was an edition of Lucan's *Pharsalia*, of 525 pages, of which 500 copies were printed. Four printers were successively employed at Strawberry Hill, beginning with William Robinson ("a foolish Irishman," Walpole called him) and ending with the most famous, Thomas Kirgate. The latter's name first appeared in the imprints in 1765 and remained there during the remainder of the Press's existence.

Many of the works issued at Strawberry Hill were the product of its master's pen. Walpole's writings, though valuable because of the information they contained, were not of a popular nature. In one of his letters he said: "Of my new fourth volume I printed six hundred, but as they *can* be had, I believe not a third part is sold. This, a very plain lesson to me, that my editions sell for their curiosity, and not for any merit in them—and so they would if I printed

'Mother Goose's Tales,' and but a few. If I am humbled as an author, I may be vain as a printer!" The important items produced at Strawberry Hill number more than a hundred.

The Darlington Press was established by George Allan, an attorney, at Blackwell Grange, near Darlington, about 1768. Allan's first production was a charter granted by Queen Elizabeth to the free school of the village. His ability to print correctly is attested in the following passage in a letter written by his son:

> A regular Printer having set up business in the town during the progress of it, a frame was made to hold four quarto pages (the previous part having been performed by a page at a time) which was composed at home and sent with the paper ready damped, to be worked off by the Printer. The tracts relating to Gretham and Sherburne Hospitals were printed in the same manner; and it is curious to observe that an intimate acquaintance of my father's, now living, asserts that the proofs scarce ever stood in need of correction, he being himself not only the compositor, but the distributor of the types when the form was broken up.

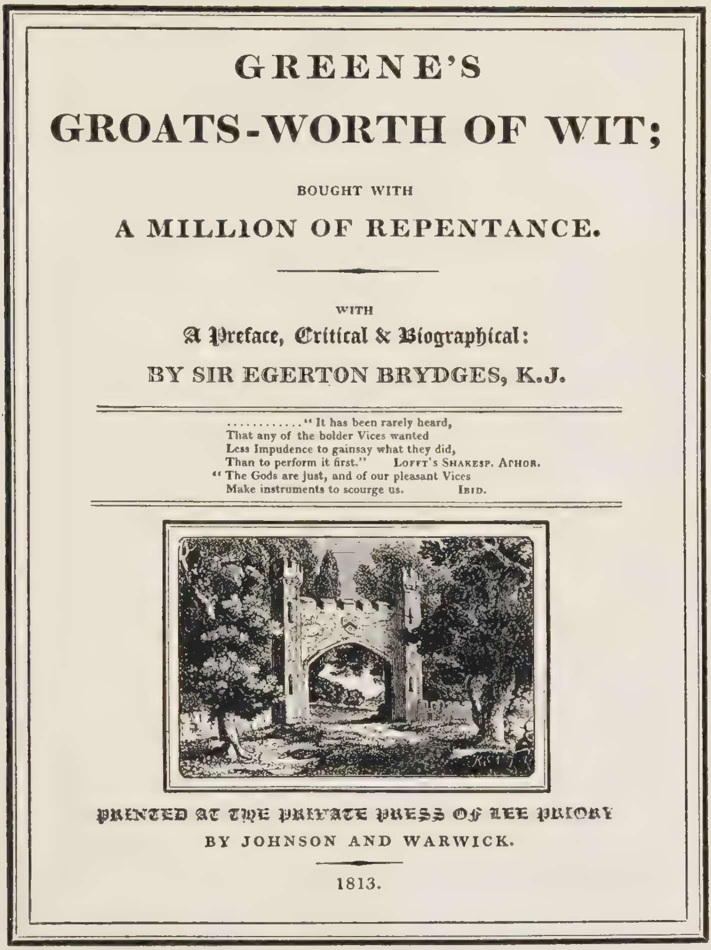
Allan later employed a journeyman printer named George Smith, who proved to be unsatisfactory and was discharged. The troubles of an employer of labor in his time are set forth in another passage in the letter quoted above:

> After Smith's failure he was again retained for the private press, but he was the perpetual cause of trouble and anxiety; for my father never went into the printing room

> without being irritated by the dirty manner in which the forms were kept and the filthy state of the types when distributed. Besides this, more time was lost in correcting repeated proofs than he could well bear; and the fellow becoming shamefully addicted to cock-fighting, a vice very prevalent in this county, which my father if possible held in greater abhorrence than Drunkenness, he was dismissed.

Allan inscribed some of his books, "Printed by the friendship of George Allan, Esq., at his private press at Darlington." One hundred and seventy-nine items, varying in size from single leaves to bound books, came from his Press. He planned an ambitious copperplate peerage in 42 numbers but abandoned it after the publication of the first number. He died in 1800.

The Lee Priory Press was established in July of 1813, at Lee Priory, near Canterbury, by Sir Egerton Brydges, a writer of some attainments and possessor of a valuable library of old English literature. The printers were John Warwick and John Johnson, the latter having a right to a place in the annals of printing because of his authorship of two fat little volumes entitled *Typographia, or the Printers' Instructor*, published in 1824. Brydges said in a letter to Dibdin that he was persuaded by the two printers "with much difficulty" to engage in the enterprise. "I consented on express condition that I would have nothing to do with expenses; but would gratuitously furnish them with copy, and they must run all hazards, and, of course, rely on such profits as they could get. These printers might have done very well if they had been



GREENE'S

GROATS-WORTH OF WIT;

BOUGHT WITH

A MILLION OF REPENTANCE.

WITH

A Preface, Critical & Biographical:

BY SIR EGERTON BRYDGES, K.J.

............"It has been rarely heard,
That any of the bolder Vices wanted
Less Impudence to gainsay what they did,
Than to perform it first." Lofft's Shakesp. Aphor.
"The Gods are just, and of our pleasant Vices
Make instruments to scourge us. Ibid.

PRINTED AT THE PRIVATE PRESS OF LEE PRIORY
BY JOHNSON AND WARWICK.

1813.

A Lee Priory title page, Kent, England, 1813.

decently prudent. They quarreled as early as 1817, and Johnson quitted. The Press was not finally given up until 1823." Brydges added: "The number of copies of works printed has in no case exceeded 100 and I have reason to believe the complete sets fall short of 30."

The first Lee Priory production, dated 1813, was *Selections from the Poems of Margaret Cavendish, Duchess of Newcastle*, of which twenty copies, one on India paper, were printed. All were gratuitously distributed. About forty books and pamphlets and nearly as many single leaves were printed in the ten years of the existence of the Press. The best known is *Wood Cuts and Verses*, issued in 1820. In it appear all the woodcuts and all the type faces possessed by the Press. In a couplet from Coleridge reading

> With murmurs musical, and swift, Jug, Jug,
> And one low piping sound more sweet than all,

the last word was changed by John Warwick to read "ale." The editor corrected the error twice, against remonstrance on the part of the printer, who insisted that "ale" was the word intended by the author. "Nothing," said he, "could be clearer: for is there not a jug, a jug, a piping sound more sweet than ale? A song, a pipe, a jug of ale."

Sir Egerton Brydges in 1818 went with his family to the Continent to reside and died in Geneva at the age of seventy-five. The Press was discontinued in 1823.

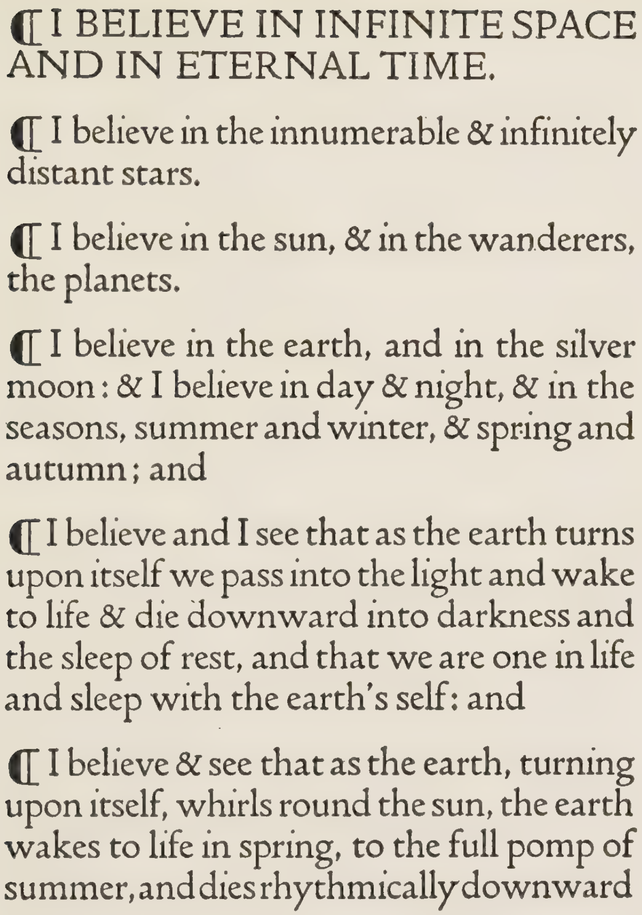
The Auchinleck Press was started at Auchinleck House, near Cumnock, Ayrshire, Scotland, in 1815 by Sir Alexander Boswell, son of James Boswell, the biographer of Dr. Johnson. Boswell told the following story of its founding in a letter to Dibdin dated May 5, 1817: "Having in the year 181—(I forget the date at present) resolved to print a facsimile of a black-letter tract in my possession, which I considered unique, namely, 'The disputation between John Knox and the Abbot of Crossragruel,' for this purpose I was constrained to purchase two small fonts of black-letter and to have punches cut for 18 or 20 double letters and contractions. I was thus enlisted and articled into the service; and being infected with the type fever the fits have periodically returned." The stock of type was later increased, he said, to eight small fonts, and a large Ruthven press was substituted for the small one. The first product of the Press was entitled *The Tyrant's Fall*, five pages octavo, written by Alexander Boswell and printed by A. and J. Boswell, the latter, a brother, being editor of a variorum edition of Shakespeare.

Sir Alexander Boswell was an admirer of Robert Burns, and, having musical talent, he set some of Burns' poems to music. He conceived the idea that a monument should be erected to the Scotch poet's memory on the banks of the River Doon and with a friend he advertised a meeting to start the project. No others attended, but the two drew up resolutions commending the project, voted thanks to the chair, printed the resolutions, and distributed them widely. The result was a subscription of 2,000 pounds. Boswell's political writings involved him in a duel in which he was killed in 1822.

"Jamie" Sutherland was both compositor and pressman at the Auchinleck Press. His name appears in some of its imprints. Twelve to fifteen pamphlets and about as many single leaves issued from it during the three or four years of its existence.

The Middle Hill Press was started by Sir Thomas Phillips at his residence, known as "Middle Hill," in Worcestershire, England, in 1819. He afterwards removed it to Thirlestane House, at Cheltenham. Phillips was one of the world's greatest collectors of manuscripts, his library numbering sixty thousand. Not only did he collect manuscripts; he mastered their contents, and he established the Middle Hill Press to make the knowledge thus acquired available to others. He died in 1872. His literary property was disposed of in a series of sales to which many Continental governments sent representatives to make purchases. An incomplete list of Middle Hill books and pamphlets occupies fourteen pages in Lowndes' *Bibliographer's Manual.*

The Great Totham Press was established by a farmer, Charles Clark, at his residence near Malden, England, in 1834. Clark printed for the amusement of his friends and neighbors. Some of his pamphlets were silly and indecent, and one of them resulted in an action for libel. What is believed to be a complete



¶ I BELIEVE IN INFINITE SPACE AND IN ETERNAL TIME.

¶ I believe in the innumerable & infinitely distant stars.

¶ I believe in the sun, & in the wanderers, the planets.

¶ I believe in the earth, and in the silver moon: & I believe in day & night, & in the seasons, summer and winter, & spring and autumn; and

¶ I believe and I see that as the earth turns upon itself we pass into the light and wake to life & die downward into darkness and the sleep of rest, and that we are one in life and sleep with the earth's self: and

¶ I believe & see that as the earth, turning upon itself, whirls round the sun, the earth wakes to life in spring, to the full pomp of summer, and dies rhythmically downward

First page of the *Credo*. Printed by the Doves Press, Hammersmith, 1908.

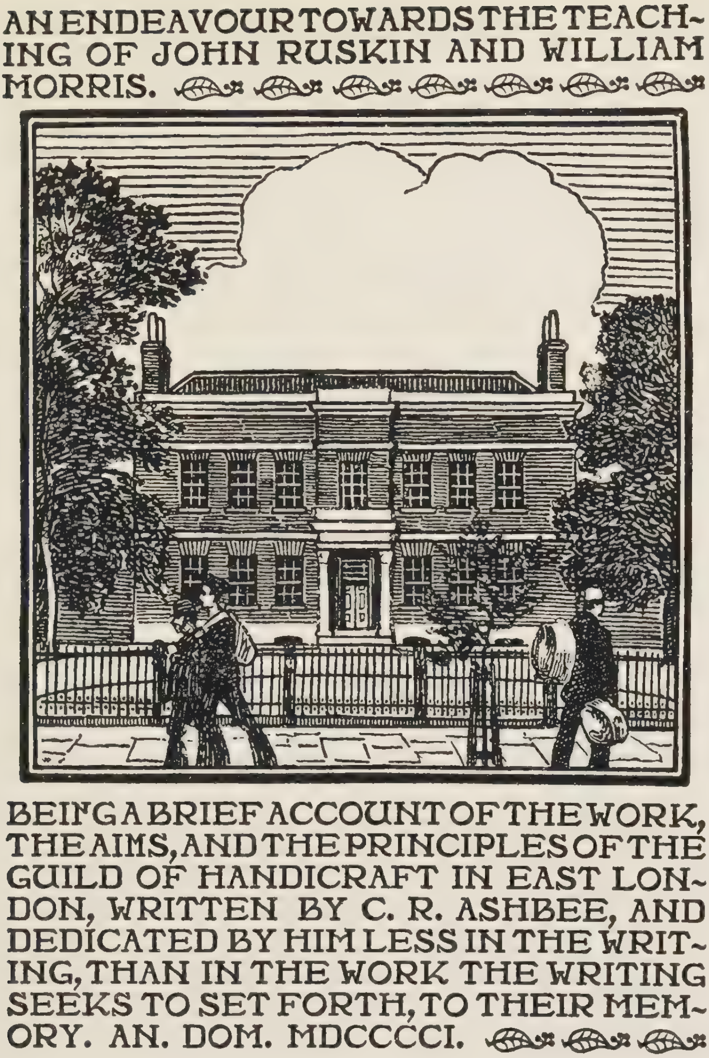
collection, covering the years 1834 to 1847, is in the British Museum.

The Beldornie Press was established by Edward Vernon Utterson at Beldornie Tower, Pelham Field, Ryde, on the Isle of Wight, in 1840. Sixteen books and about an equal number of pamphlets were issued from it during the three years of its existence.

The Daniel Press was established at Frome, England, in 1846 by C. H. O. Daniel while he was still a boy. Later, in 1874 at Oxford, after he had become the Reverend C. H. O. Daniel, D.D., he began to produce books and pamphlets and continued to print until his death in 1919. Dr. Daniel in 1877 revived the use of the punches, matrices, and types donated to Oxford by Dr. Fell in 1706, of which more will be said in the next chapter. His list of books includes more than sixty titles.

The most famous of all the so-called private presses was William Morris' Kelmscott Press. Morris drew from his beloved incunabula not only the inspiration, but in many cases the form and substance of his productions. The Kelmscott volumes are highly prized by collectors, and their value rises as the available supply lessens through the continual withdrawal of copies from the market to a final haven in the public libraries.

Next to Kelmscott books probably the most highly prized collectors' items are those of the Doves Press, which was established by T. J. Cobden-Sanderson and Emery Walker at Hammersmith in 1900. Its



AN ENDEAVOUR TOWARDS THE TEACHING OF JOHN RUSKIN AND WILLIAM MORRIS. ❧ ❧ ❧ ❧ ❧ ❧ ❧

BEING A BRIEF ACCOUNT OF THE WORK, THE AIMS, AND THE PRINCIPLES OF THE GUILD OF HANDICRAFT IN EAST LONDON, WRITTEN BY C. R. ASHBEE, AND DEDICATED BY HIM LESS IN THE WRITING, THAN IN THE WORK THE WRITING SEEKS TO SET FORTH, TO THEIR MEMORY. AN. DOM. MDCCCCI. ❧ ❧ ❧

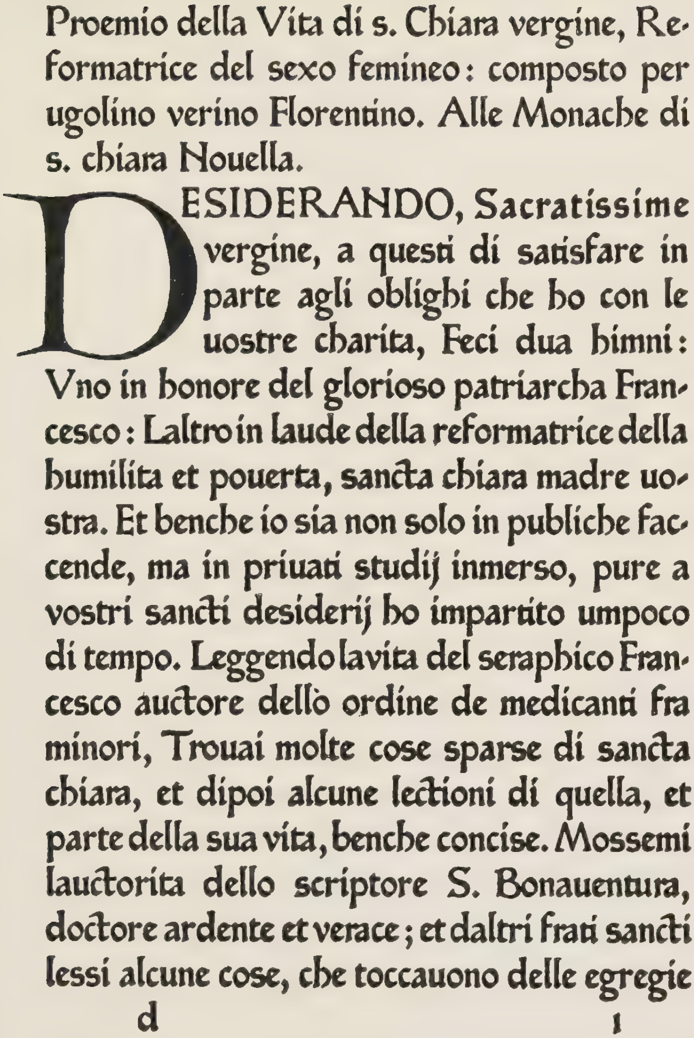
First page of the first book printed by C. R. Ashbee at the Essex House Press, London, 1901.

most famous production was the Doves Bible, with a great red initial "I" dominating the opening chapter of Genesis. The Doves Press type was designed after that of Nicolaus Jenson. When in 1916 Cobden-Sanderson decided to discontinue the Press, he threw the types into the River Thames from Hammersmith Bridge.

Charles Ricketts made printing history in England, first through books designed by him but printed by others, and later through the productions of the Vale Press, established in the early nineties. A writer in the London *Times* made this interesting comparison between the Kelmscott and Vale productions: "The Kelmscott books not only look as if letter and decoration had grown one out of the other; they look as if they could go on growing. The Vale Press books, on the other hand, have all the supersensitiveness of things which have been deliberately made according to a fastidious though eclectic taste and a strict formula. It is the difference between naturalness and refinement."

The Essex House Press was established by C. R. Ashbee, of the Guild of Handicraft, in East London in 1889. Ashbee endeavored to obtain some of the type used by William Morris, but failing to do so, he adopted a Caslon face for his first two years, after which he used a letter designed by himself.

The best known of present-day private presses is the Ashendene, conducted by C. H. St. John Hornby at his residence, Shelley House, on the Chelsea Em-



Proemio della Vita di s. Chiara vergine, Reformatrice del sexo femineo: composto per ugolino verino Florentino. Alle Monache di s. chiara Nouella.

DESIDERANDO, Sacratissime vergine, a questi di satisfare in parte agli oblighi che ho con le uostre charita, Feci dua himni: Vno in honore del glorioso patriarcha Francesco: Laltro in laude della reformatrice della humilita et pouerta, sancta chiara madre uostra. Et benche io sia non solo in publiche faccende, ma in priuati studij inmerso, pure a vostri sancti desiderij ho impartito umpoco di tempo. Leggendo la vita del seraphico Francesco auctore dellò ordine de medicanti fra minori, Trouai molte cose sparse di sancta chiara, et dipoi alcune lectioni di quella, et parte della sua vita, benche concise. Mossemi lauctorita dello scriptore S. Bonauentura, doctore ardente et verace; et daltri frati sancti lessi alcune cose, che toccauono delle egregie

d 1

First reading page of *Vita di S. Chiara*. Printed by C. H. St. John Hornby at the Ashendene Press, London, 1921. First four lines in red, initial in blue, remainder in black.

bankment, in London. Hornby was at one time an active partner in the great publishing house of W. H. Smith and Son, and he learned the practical part of printing while working as a lad in its plant. It was in 1895 that he set up a private Press in his father's residence at Ashendene in Hertfordshire, six years later removing it to the home he had established for himself in London.

Emery Walker of the Doves Press, who had been William Morris' tutor, taught Hornby some of the finer traditions of the craft, and it was Walker who designed for him a type face based upon that used by the first printers in Italy, Sweynheym and Pannartz, which he called the Subiaco. Later Hornby added the Fell types used by Dr. Daniel at Oxford, which with the Caslon with which he began, form his typographic trinity. Hornby has done practically all the typesetting of the Ashendene books. In the thirty years of its existence the Press has averaged slightly more than one volume a year in editions varying in number from sixteen to 252, most of them, however, less than fifty. Hornby has used two hand presses, the first being dismantled and laid aside on the arrival of its successor. He employs one assistant. His type lines are closely set, and his pages are usually without decoration. The paper and ink are specially made and are of the finest quality.

James Guthrie founded the Pear Tree Press in 1899, first at Harting and later at Flansham, near Bognor, England, where it is now located. Many of the books done by Guthrie were set in the Myrtle type owned exclusively by him. A number of his books were done from intaglio plates. Guthrie has invented a system of proportional typographic composition, the plan of which he has set forth in a book issued by the Pear Tree Press.

What was originally the Dun Emer, but is now the Cuala, Press was founded at Churchtown, near Dublin, Ireland, in 1902 by three Irish women, Miss Gleason and the Misses Lily and Elizabeth C. Yeats, the last named being still in control. It was a part of a movement to promote interest in craftsmanship among Irish working girls. Emery Walker was helpful in starting the Press along the right artistic lines. Extreme simplicity characterizes its work.

The St. Dominic's Press was started about 1917 at the Hampshire Workshops, Hammersmith, London, by Douglas Pepler. It was later moved to Ditchling, in Sussex, and became a part of the Dominican Colony. Its books are printed on hand made paper, and all the work is done by hand. Among those who have been associated with it are Eric Gill, Stanley Morison, David Jones, and Desmond Chute.

The Golden Cockerel Press was founded in 1920 at Waltham St. Lawrence, Berkshire, England, by Harold Midgeley Taylor, who died in 1925. He was succeeded by Robert Gibbings, who made the woodcuts for some of the early Golden Cockerel books.

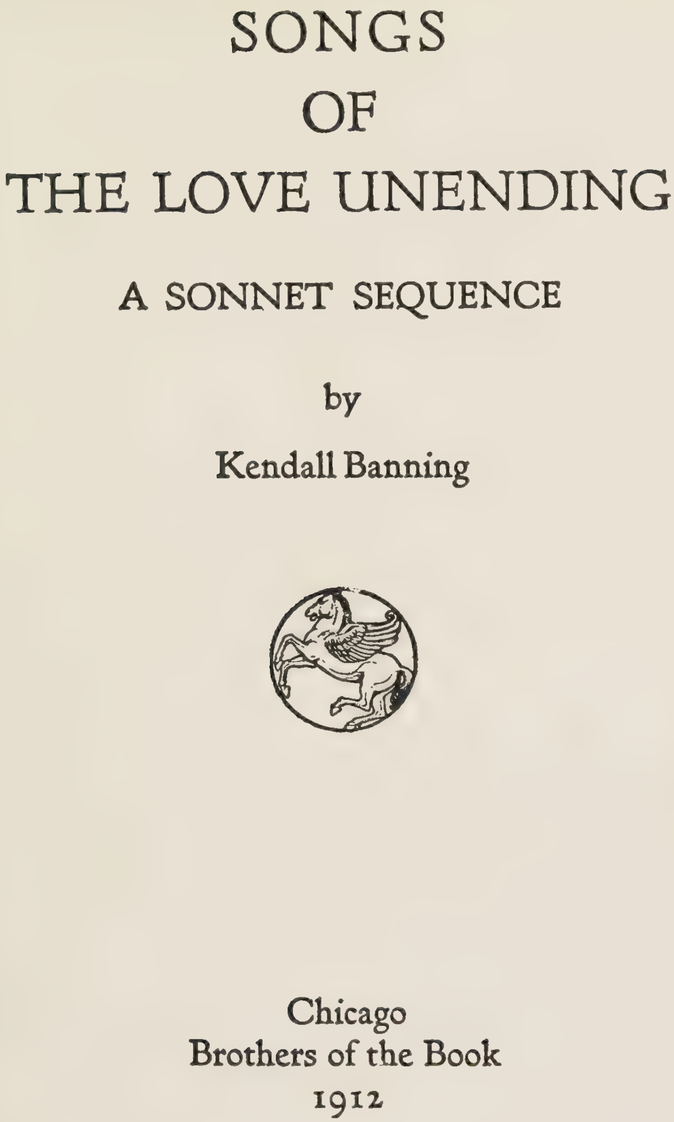
Other notable present-day English private presses and their conductors are: the Caradoc, by H. G.

Webb, the Eragny, by Lucien Pissarro, the Beaumont, by Cyril W. Beaumont, and the Swan, by Miss L. D. O. Waters, in London; the Hogarth, by Mr. and Mrs. Leonard Woolf at Richmond; the Gregynog, by Robert Ashwin Maynard, at Newton, Montgomeryshire; the High House, by James E. Masters, at Shaftesbury, Dorset; the Priory, by Robert King, at Tynemouth, Northumberland; the Seven Acres, by Loyd Haberly, at Long Crendon, Bucks; and the Stanton, by Mr. and Mrs. Richard Stanton Lambert, at Wembley Hill.

An unusual private press is that of the Officina Bodoni Montagnola, conducted by Dr. Hans Martersteig at Montagnola di Lugano, in Switzerland. Although born in Germany, Dr. Martersteig has lived almost wholly in Switzerland. He received from the Italian Government the exclusive right to use the matrices left by Giambattista Bodoni, and he uses them for the production of beautiful books in limited editions.

In the United States the best-known private press is that now known as the Village Press, founded by Frederic W. Goudy, the story of which is related in the preceding chapter. The Albion hand press used by William Morris was brought to America by Goudy and used for a time by him. It was subsequently sold to Spencer Kellogg, who is using it at his newly established Aries Press at Eden, New York.

Most individual among private presses is that conducted at Chillicothe, Ohio, by Dard Hunter. Hunter was taught to set type by his father, afterwards serving an apprenticeship of several years at the Roycroft



SONGS
OF
THE LOVE UNENDING

A SONNET SEQUENCE

by

Kendall Banning

Chicago
Brothers of the Book
1912

Title page of *Songs of the Love Unending*. Printed by Frederic W. Goudy at the Village Press, New York, 1912.

printshop at East Aurora, New York. He subsequently went abroad and studied type design, paper-making, and tool-making in Vienna, London, and Italy. He returned to America and set up a paper mill, type foundry, and printshop at Marlborough-on-Hudson, New York, where in 1915 he produced his first book. Only four more books have since come from the Press, later removed to Chillicothe, three of them on paper-making. A sixth book, also on paper-making, has been announced for publication in 1931. The unique feature of Hunter's books is that they are entirely his own work. He designs his type faces, casts the type, writes the subject matter of his books, sets it in type, prints by hand upon paper of his own manufacture, and binds the volumes. No other person in the history of printing has shown so much versatility, and the remarkable thing about the multitude of the operations is that all are well done.

The Cornhill Press of Thomas M. Cleland's youthful days would have taken high rank had that accomplished maker of printed things not turned to other avenues of endeavor. Clarke Conwell and Mrs. Conwell printed under the name of the Elston Press, at New Rochelle, New York, during the early years of the present century and produced several books that are prized by collectors. It was true of all these presses, as of many of the English private presses, that although none of them could be classed as a money-making venture, their productions were as a rule not distributed gratuitously.

Detroit has had the Cranbrook Press, established by George G. Booth in 1900. In Chicago there have been the Blue Sky Press, organized by Langworthy and Stevens in the nineties to specialize in small books of distinct literary merit; the Alderbrink Press, organized by Ralph Fletcher Seymour, which began to print books and catalogues in 1899; and the Roadside Press, of which there is scant record and which is known to have produced but a few books. And to conclude our list there is the Philosopher Press, operated by Helen Bruneau Van Vechten at the Sign of the Green Pine Tree at Wassau, Wisconsin.

CHAPTER XXII

TYPE-MAKING

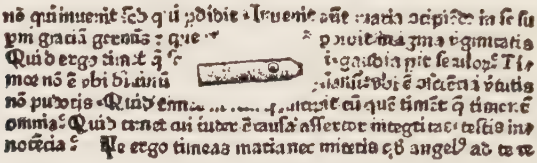
VARIOUS theories have been advanced as to the method by which the first types were made. Theod. Bibliander, writing in 1548, was the first to suggest that they were made of wood. He said: "First they cut their letters on wood blocks the size of an entire page; but because the labor and cost of that way was so great, they devised movable wooden types, perforated and joined one to the other by a thread." Talbot B. Reed, author of the excellent book, *The Old English Letter Foundries*, and himself a practical type-founder, did not accept this theory. Neither did Charles Enschedé of Haarlem, head of the great type foundry bearing that name, who made a profound study of the invention of printing from movable types and of everything having a bearing upon type-founding. With all the assistance of modern instruments of precision Enschedé failed to produce workable wooden types of small size. He said of his experiments: "The project was not feasible, and I was convinced that no wood-engraver would be capable of making wooden types in such a way that they would remain mathematically square." Reed accepted as a fact the statement that such types existed in Strasbourg, Venice, and Mainz, "which tradition ascribed to the first printers," but said that on the question whether any book was ever printed with such type, the evidence was "wholly inconclusive."

A second theory is that the letters were engraved upon the ends of types individually cast blank. This theory is based upon the word *sculptus* (cutter) which in one form or another was frequently used by the early printers in their colophons. Many writers of distinction have accepted this theory, but Reed dismissed it with the statement: "We must confess that there seems less ground for believing in the use of 'Sulpto-fusi' types as the means by which any of the early books were produced, than in the perforated wood types. The enormous labor involved in itself renders the idea improbable."

Still another theory is that the types were engraved in a line and afterwards cut apart. Such a process would be open to the objection made by Reed to the second theory described above and is practically as untenable.

The first types were probably cast in sand or clay. There were difficulties attendant upon either medium, but they were not insurmountable. Gutenberg and his contemporaries undoubtedly discovered the principle of the punch, matrix, and adjustable mold, and thereby made type (by hand, of course) much as it is made at the present time. The punches probably were of wood when sand was used, and of brass or bronze when the matrix was of soft lead. Updike believes the molds were made of brass. Such devices have been used in modern times by way of experiment to test the accuracy of this theory and found to work successfully.

A cost book kept by the Ripoli Press of Florence late in the fifteenth century shows that the metals used then were about the same as those in use to-day: steel, brass, copper, tin, lead, and iron wire—tin and lead, with antimony added, being used for letters and the other metals for molds. The shape of the types is revealed by letters that "pulled" and, lying crosswise on the type form, made an impression on the printed sheets. As will be noted in the accompanying illustration, there has been little change in the form or relative dimensions. Reed summed up the matter thus: "The types of the fifteenth century differed in no essential particular from those of the nineteenth. Ruder and rougher, and less durable they might be, but in substance and form, and in the mechanical principles of their manufacture, they claim kinship with the newest types of our most modern foundry."



A pulled type impression from *Liber de Laudibus ac Festus Gloriosae Virginis.* Supposed to have been printed in Cologne in 1468.

In the illustration showing a "pulled" type a small hole will be observed in the side. This may have taken the place of the modern "nick" as a guide to the compositor, or, as Reed has suggested, "a more probable explanation seems to be that the head of a small screw or pin, used to fix the side-piece of the mould, projecting slightly on the surface of the piece it fixed, left its mark on the side of the types as they were cast."

Fifteenth-century books were printed one page at a time. The printer probably cast enough type to print one page while another was in process of composition. The first fonts contained more characters than do modern fonts. Following the practice of the calligraphers, the early printers made frequent use of contractions. Counting these special characters, probably six thousand separate types were required by Gutenberg to print two pages of the 42-Line Bible.

Peter Schoeffer is usually regarded as the first type-founder in the larger sense. An advertisement he published in 1468, which, though acknowledging that every nation could then procure its own kind of letters, yet credited the Schoeffer pencil with the highest excellence in design, was the first of its kind.

Geofroy Tory's name must of necessity be included in any history of type-making, but as a designer and not as a founder. His great pupil, Claude Garamond, however, qualifies under both designations. The known details of Garamond's personal history are meagre, but the record of his accomplishments is clear and definite. He was the world's first great type-founder, and, as we shall see in the next chapter, his influence upon type design was profound. Garamond's productive years lie between 1540 and 1561, the latter the year of his death. Although he made a great place for himself in the history of typography, he died in poverty.

Robert Granjon of Lyons was a type-founder of distinction during the third quarter of the sixteenth century. Better known is the name of Guillaume Le Bé, which was borne by grandfather, son, and grandson. The first Guillaume was born at Troyes in 1525; the last died in 1685. The ownership of the Le Bé type foundry passed to the widow of the third Guillaume and subsequently to her four daughters. For a quarter of a century it was managed by a type-founder named Jean Claude Fournier, whose son, Jean Pierre Fournier, eventually came into its ownership.

The name of Fournier is one of the most illustrious in the history of French type-founding. There were two brothers, Jean Pierre, born in 1706, usually styled Fournier *l'aîné*, and Pierre Simon, born in 1712, who was called Fournier *le jeune*. The latter was the more famous of the two. He issued in 1764 a *Manuel Typographique* in which he advocated a point system which was identical in principle with the system of the present day. Fournier died in 1768, leaving two young sons who had but little liking for their father's business, and it disappears from history with the close of the eighteenth century. The great contemporaries of the Fourniers, the Didot family, are equally famous in the annals of printing and of type-founding.

By the middle of the sixteenth century, supremacy in printing had passed from France to the Low Countries, principally because scholarship began to find there a freer atmosphere than that resulting from the restrictions of Church and State in the French kingdom. Two great families of printers in the Netherlands, Plantin and Elzevir, were also type-founders. They sold type to other printers but exercised no great influence upon type-making or upon type design. The Elzevir family comes into the purview of this chapter mainly through its employment of Christoffel Van Dyck, probably the greatest of Dutch-letter designers. After the Elzevir business came to an end with the death of Daniel Elzevir in 1780, the Van Dyck punches and matrices changed ownership several times. Eventually they came into possession of the foundry that had been established by the brothers Isaac and John Enschedé at Haarlem in 1743, which still continues as one of the great institutions of its kind. Many of Van Dyck's punches and matrices were destroyed in the eighteenth century, when the growing influence of Didot and Caslon seemed to spell their doom.

William Caxton was not only England's first printer but also her first type-maker. It has already been noted that he used neither Roman nor Gothic type faces, but types modeled after designs of his own. Caxton's contemporaries and immediate successors were most of them both printers and type-makers, but they made types largely for the reason that there were no founders from whom to buy. As time went on, this condition changed, and we find in the histories of printing in England frequent references to the purchase by English printers of types produced by the Continental founders.

John Day, who was born in 1522 and who set up for himself in 1546, is worthy of special mention here because he was the first type-maker to cut Saxon characters and one of the first to cut Roman and Italic types on uniform bodies.

Long before the passing of Day, during the middle years of the sixteenth century, the Government put its heavy hand upon the printers, one of its decrees being that no printing should be done outside of London excepting at the Universities of Oxford and Cambridge. The Oxford University Press began in 1585 and, with a history of eminent accomplishment to its credit, is still in existence. The famous "Fell" types which have figured so prominently in its history are so called because they were purchased in Holland by Dr. John Fell, later Bishop of Oxford, and presented by him to the Press. Some of them were designed by Christoffel Van Dyck. Dr. Fell also employed Peter Walpergen, a Dutch letter-cutter, to take charge of the Oxford type foundry.

A Star Chamber decree of 1637 limited the number of type-founders in all of England to four, and John Grismand, Thomas Wright, Alexander Fifield, and Arthur Nicholls were appointed. A son of the last named, Nicholas Nicholls, in 1667 became "letter-founder to His Majesty" Charles II, and it was he who in 1665 issued the first English specimen sheet.

Joseph Moxon calls for mention here, not because of his type-founding, which from the specimens he published must have been worse than mediocre, but because he was the first to write at length on the subject. His *Mechanick Exercises Applied to the Art of Printing, or the Doctrine of Handy-Works*, published in 1683, gives a detailed description of a variety of trades, among them letter-cutting. The volumes were reprinted by the De Vinne Press for the Typothetae of the City of New York in 1896.

The history of William Caslon may be said to be almost the history of English type-founding during the entire middle period of the eighteenth century. Born in 1696, Caslon began as a letter-founder in 1720, under circumstances to be related in the next chapter. His types came into such general use in England as almost entirely to stop importation from the Continental foundries. He died in 1766. Caslon had three direct descendants who bore his name—son, grandson, and great-grandson, all of whom were also type-founders. The business he established is still continued as one of the representative English type foundries. John Baskerville is the other of the two great names in British type-founding history. After his death in 1775 his types and other materials were dispersed.

Benjamin Franklin, first in so many things, was the first person to cast printing types, although only as "sorts," in what is now the United States of America. When at the age of nineteen young Franklin was employed in Palmer's printing office in St. Bartholomew's Close in London, he occasionally visited the type foundry of Thomas James, located near-by, and there observed how types were cast. After his return to America he became foreman of the printing shop of Samuel Keimer in Philadelphia, and finding the types much worn and the fonts in need of sorts, which when ordered from England were a long time in arriving, Franklin contrived a mold, used old types for punches, and cast new ones.

Abel Buell, a silversmith of Killingworth, Connecticut, was the first American to make a systematic effort to cast types, and his first font, crude in execution and design, was produced on April 1, 1769. The first type foundry to be permanently established was that of Christopher Sauer at Germantown, Pennsylvania, late in 1771 or early in 1772.

Two Scotchmen named Archibald Binny and James Ronaldson established a foundry in Philadelphia in 1796. David and George Bruce started as the pioneer type-founders in New York about 1814, their first specimen book appearing in 1815. David Bruce, Jr., invented in 1838 a type-casting machine which revolutionized the type-making industry. Type foundries were gradually established in the principal cities of the United States, and in 1892 most of them united in a common ownership under the name of the American Type Founders Company, which now largely controls the business of type-founding in the United States and its dependencies.

Apart from the fact that types are now cast by machine instead of by hand, only two important changes have come through five centuries of use—the point system, which relates to the size of the type body, and the lining system, which relates to the position of the type face upon the body. Originally type sizes were known by names, such as nonpareil, brevier, pica, etc. What such a system did not provide, but what was needed, was uniformity of nomenclatures. Fournier, as is noted above, solved the problem of a better type classification by suggesting the point system which is now in use in the United States, having been adopted by the Type Founders' Association in 1885. Because of the difference between the French and the American standards of measurement, however, the sizes are not interchangeable. By the second of the two changes, the lining system, type faces cast on uniform bodies are made to line at top and bottom. Theoretically the plan is admirable but artistically the result is not always happy.

Typesetting by machinery took practical shape in men's minds early in the nineteenth century. William Church took out the first patent in England in 1822. Ottmar Mergenthaler, of Baltimore, was the first to conceive the correct principle, which is to set and cast type in practically one operation. He took out his first patent in 1885, but it was not until 1886 that his invention was put to practical use in the office of the New York *Tribune*. The Mergenthaler linotype machine casts, not separate types, but a line of types upon a single slug. A machine to cast single types was invented by Tolbert Lanston, of Washington, in 1887. It is known as the Lanston monotype machine.

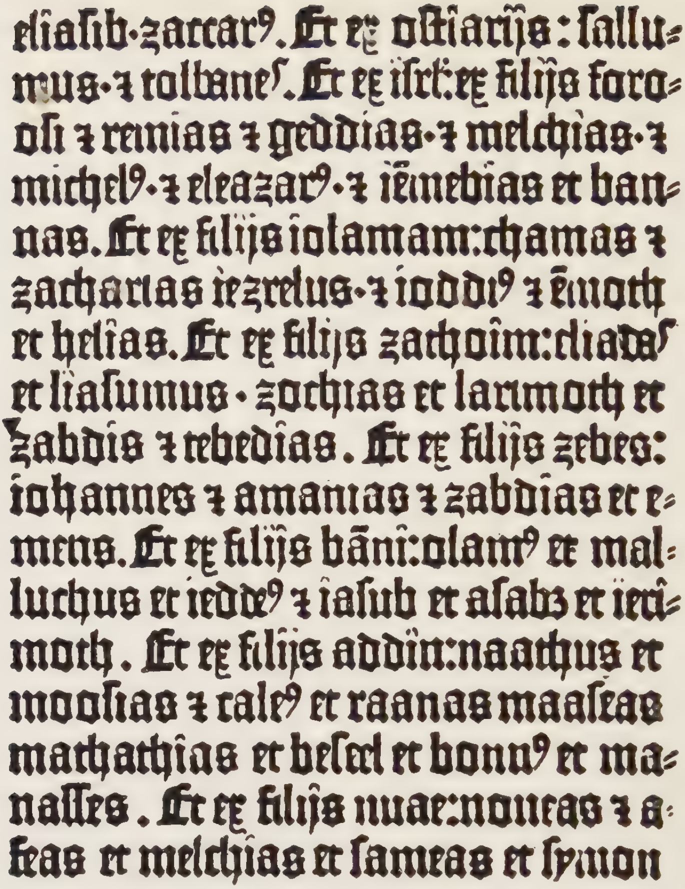
CHAPTER XXIII

TYPE FACES

USUALLY when the invention of printing is spoken of, what is really meant is the invention of typography—printing from movable types. The first typographers designed their own letters, molded the types, made the ink—in fact, performed all of the operations required to produce a printed page with the single exception of the manufacture of the paper upon which it was printed.

Civilization's history is a record of successive steps of progress. Man in all his enterprises has proceeded from one stage to another by gradual processes, and the invention of typography is no exception to the rule. The pioneer typographers found books already in existence, books the pages of which had been produced not with type and press, but with pen and brush. But this process of reproducing manuscripts was laborious and expensive, and the task the typographers set for themselves was to produce the equivalent of the written page more quickly and at reduced cost.

I do not subscribe to the theory that John Gutenberg and other printers deliberately attempted to deceive the purchasers of their printed books into accepting them as manuscript books. The fact that their books were close imitations of manuscripts, to



eliaſib·zaccar⁹. Et ex oſtiariis: ſallumus·⁊ tolbaneſ. Et ex iſrl: ex filiis forooſi ⁊ remias ⁊ geddias·⁊ melchias·⁊ michel⁹·⁊ eleazar⁹·⁊ iẽmebias et bannas. Et ex filiis iolamam: chamas ⁊ zacharias iezrelus·⁊ ioddi⁹ ⁊ ẽmoth et helias. Et ex filiis zachoim: eliadaſ et liaſumus· zochias et larimoth et zabdis ⁊ rebedias. Et ex filiis zebes: iohannes ⁊ amanias ⁊ zabdias et emens. Et ex filiis bãni: olam⁹ et malluchus et iedde⁹ ⁊ iaſub et aſabz et ierimoth. Et ex filiis addin: naathus et mooſias ⁊ cale⁹ et raanas maaſeas mathathias et beſeel et bonu⁹ et manaſſes. Et ex filiis nuae: noneas ⁊ aſeas et melchias et ſameas et ſymon

Gutenberg's Gothic type, from the 42-Line Bible, exact size of the original. The specimen shows the peculiar contraction mark resembling an inverted figure "6."

my mind, is to be attributed to the common tendency to follow a beaten track.

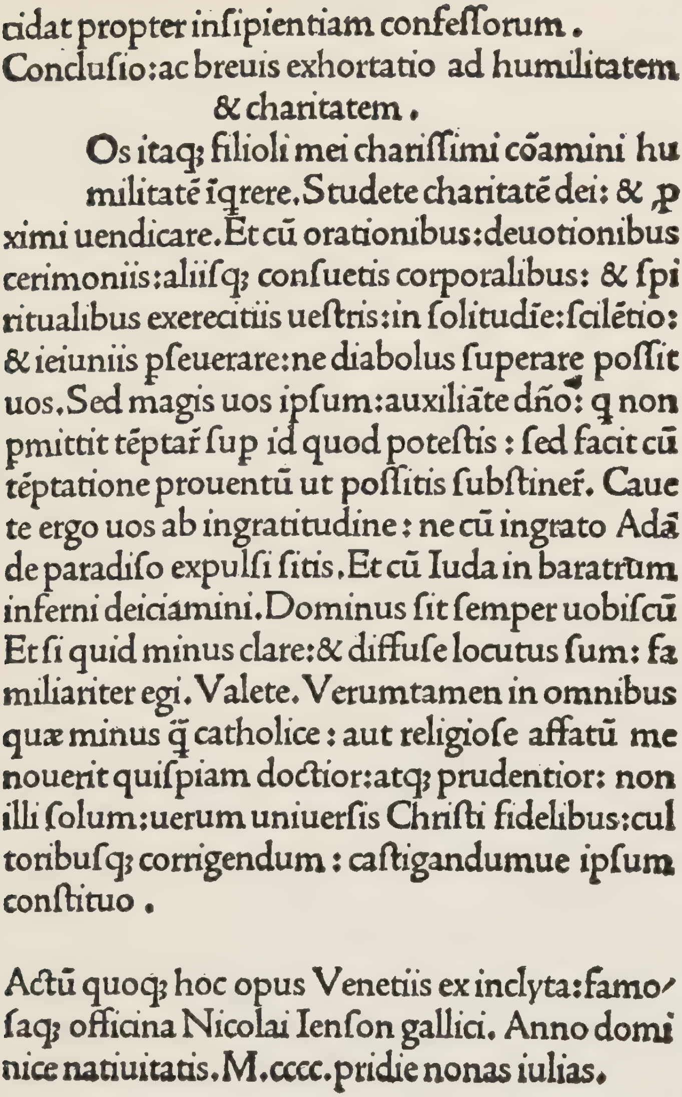
Gutenberg's original type face was a Gothic letter, such as appeared in most of the manuscript books, and with it he printed the 42-Line Bible. He used another type face for another book, the *Catholicon* or theological dictionary, printed from types which were Gothic in shape but possessing a Roman tendency—a "round Gothic," one might say. It is not known certainly which of these two books was produced first, but the weight of evidence seems to favor the Bible. The Gothic type face designed by Peter Schoeffer, Gutenberg's successor, was an improvement upon Gutenberg's Gothic.

Adolph Rusch (the "R Printer" so-called) was the first printer to adopt an unmistakable, though crudely shaped, Roman letter, which he used to produce a book printed in Strasbourg in 1464. Sweynheym and Pannartz used a distinctly Roman type face, and the Speyer brothers did likewise; but it remained for Nicolaus Jenson to bring the Roman face to the perfection that has been described in an earlier chapter.

The early printers of France, Spain, Switzerland, and the Low Countries modeled their type designs upon those of Germany and Italy. William Caxton, the first to print in England, used type faces which marked a departure from both the Gothic and the Roman faces of his predecessors, but it cannot be said that from the point of view of legibility they were improvements, and happily they have not survived.

Next to the Roman, the first new type face that was to endure came in with the sixteenth century. Italy was again the scene, and the greatest of the Italian printers, Aldus Manutius, was its sponsor. The face was a sloping form of the Roman letter, but as designed for Aldus it had no sloping capitals; it was used by him with capitals of a height below that of the ascending lower-case letters. The oft-repeated statement that the design was suggested by the handwriting of Petrarch, the Italian poet, has no basis in fact. Aldus employed Francesco Raibolini (the painter "Il Francia"), who had previously served him as a designer, to make the drawings for the new face, but the *motif* governing it was probably not original with either Aldus or Raibolini. There are extant manuscripts written in a sloping hand very similar to Italic which were produced earlier than 1501, the year in which Aldus first made use of the type.

In Italy the face was called "Aldino." The Venetian Council gave Aldus the exclusive right to use the character, and the Holy See thrice confirmed the patent, but the design was nevertheless quite generally pirated, particularly in other countries. Coming to the pirates out of Italy, they called it *Italic*, and by that name it has since been known. The slanting capitals of the face first appeared in a pirated edition of an Aldus book issued by a printer at Lyons, France, and were not adopted by the Aldine Press until fifty years after its founder's death, although Aldus in



cidat propter inſipientiam confeſſorum.

Concluſio: ac breuis exhortatio ad humilitatem & charitatem.

Os itaq; filioli mei chariſſimi cõamini humilitatē ĩqrere. Studete charitatē dei: & ꝓximi uendicare. Et cũ orationibus: deuotionibus cerimoniis: aliiſq; conſuetis corporalibus: & ſpiritualibus exerecitiis ueſtris: in ſolitudĩe: ſcilẽtio: & ieiuniis ꝑſeuerare: ne diabolus ſuperare poſſit uos. Sed magis uos ipſum: auxiliãte dño: q non ꝑmittit tẽptar̃ ſup id quod poteſtis: ſed facit cũ tẽptatione prouentũ ut poſſitis ſubſtiner̃. Caueте ergo uos ab ingratitudine: ne cũ ingrato Adã de paradiſo expulſi ſitis. Et cũ Iuda in baratrũm inferni deiciamini. Dominus ſit ſemper uobiſcũ Et ſi quid minus clare: & diffuſe locutus ſum: familiariter egi. Valete. Verumtamen in omnibus quæ minus q̃ catholice: aut religioſe affatũ me nouerit quiſpiam doctior: atq; prudentior: non illi ſolum: uerum uniuerſis Chriſti fidelibus: cultoribuſq; corrigendum: caſtigandumue ipſum conſtituo.

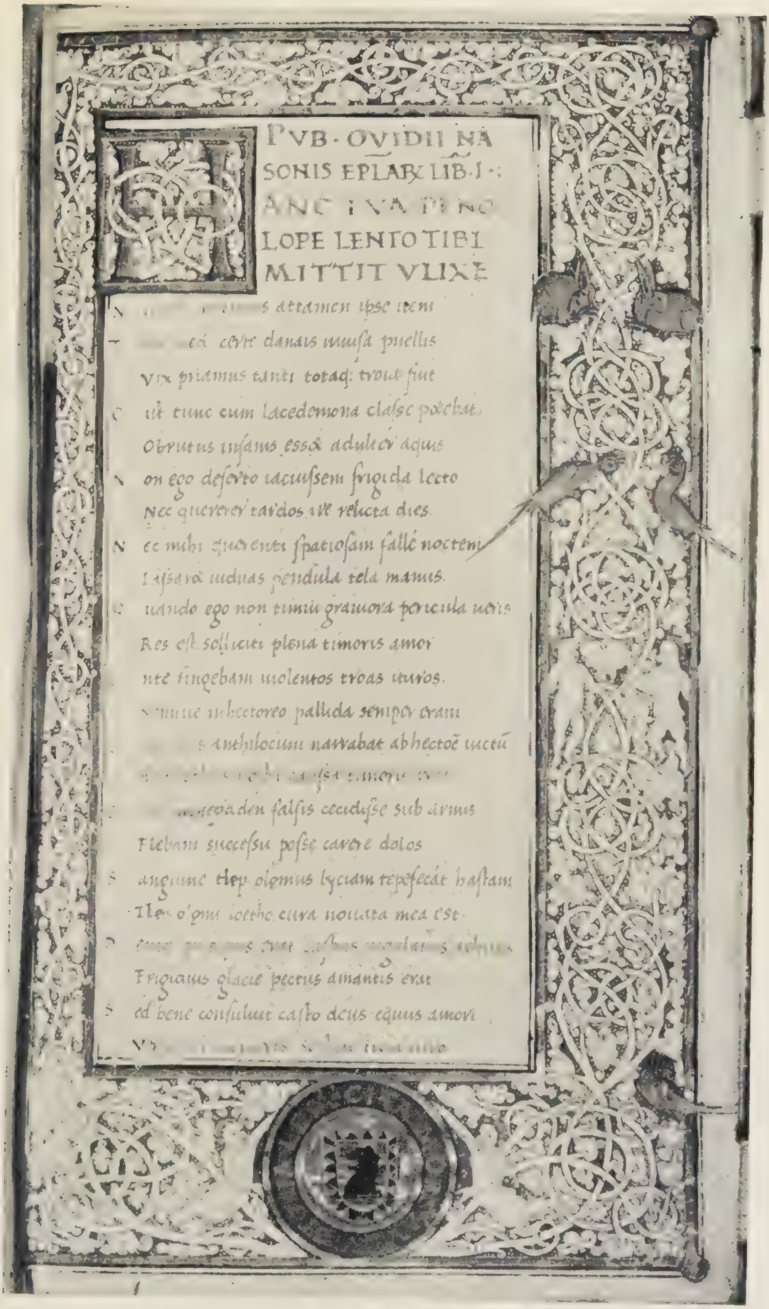
Actũ quoq; hoc opus Venetiis ex inclyta: famoſaq; officina Nicolai Ienſon gallici. Anno dominice natiuitatis. M.cccc. pridie nonas iulias.

Nicolaus Jenson's Roman type, originated at Venice in 1470.

his will, written only three weeks before he died in 1515, made a specific request that his father-in-law "personally see to it that Iulio Campagnola perfect them by adding capitals for this type."

Updike designates the first sixty years of the sixteenth century as "the golden age of French typography." During that period there lived and wrought Geofroy Tory; Claude Garamond, Tory's pupil; Henri Estienne, founder of the famous family of printers of that name; his son Robert, probably the greatest scholar-printer who ever lived; Michel Vascosan; Simon de Colines; and others almost equally distinguished for notable productions. None of these great Frenchmen, however, with the single exception of Claude Garamond, can be said to have exercised any great impression upon the history of type design. Excepting Tory and Garamond, they were printers, not type-makers. Garamond was a master designer. He took the Romans and Italics of his predecessors and added grace and elegance to them, and although the product of his pen and pencil was limited to a few designs, soon his types were used by printers everywhere on the Continent. "Garamond's Roman and Italics," says Updike, "gave the Gothic character its death blow." Garamond's career began early in the sixteenth century, and he was active until his death in 1561.

No great name emerges from the mediocre level of European typographic history from shortly after Garamond's death to the end of the sixteenth century



PVB · OVIDII NA
SONIS EPLAR LIB · I · :
ANC TVA PENE
LOPE LENTO TIBI
MITTIT VLIXE
[illegible] s attamen ipse ueni
[illegible] cā certe danais inuisa puellis
Vix priamus tanti totaq; troia fuit
ut tunc cum lacedemona classe petebat
Obrutus insanis esset adulter aquis
on ego deserto iacuissem frigida lecto
Nec quererer tardos ire relicta dies.
ec mihi quaerenti spaciosam fallē noctem
Lassaret uiduas pendula tela manus.
uando ego non timui grauiora pericula ueris
Res est solliciti plena timoris amor
nte fingebam uiolentos troas ituros.
[illegible] in hectoreo pallida semper eram
[illegible] s anthilocum narrabat ab hectore uictū
[illegible]
[illegible] etiaden falsis cecidisse sub armis
Flebam successu posse carere dolos
anguine tlepolemus lyciam tepefecerat hastam
Tlepolemi leto cura nouata mea est.
[illegible]
Frigidius glacie pectus amantis erat
ed bene consuluit casto deus equus amori
[illegible]

Illuminated page from a fifteenth-century Aragon manuscript. It may have been the inspiration of Aldus' Italic type design.

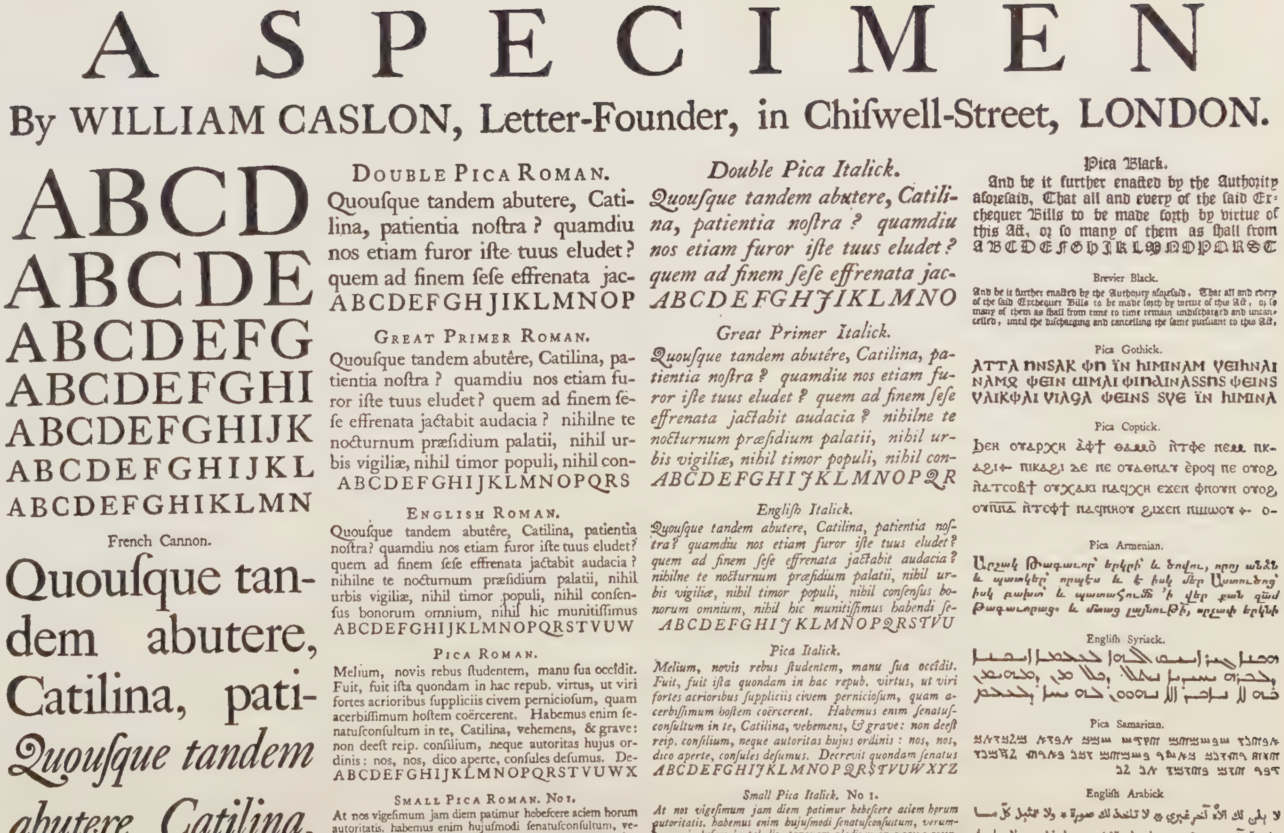
and throughout the whole of the seventeenth. During the first quarter of the eighteenth century the center of interest shifts to England, where William Caslon came to the rescue of the languishing art with a type design which, although not radically different from the letters then current, nevertheless marked an epoch in the history of printing.

Before the rise of Caslon as a type-founder it was the habit of English printers to import their type from Holland. Reed states that at the beginning of the eighteenth century there was probably more Dutch type in England than there was English type. "The Dutch artists," he adds, "appeared for the time to have the secret of the true shape of the Roman letter; their punches were more carefully finished, their matrices better justified, and their types of better metal, and better dressed, than any of which our country could boast."

John Watts, a London printer whose name will be familiar to many Americans because he was one of the employers of Benjamin Franklin when that active young American was working at his trade in London, took the initiative in a movement to correct this anomalous condition. It was he who suggested to Caslon that he become a letter-designer and type-founder, and he furnished one-fifth of the 500 pounds that was lent to Caslon by London printers to enable him to establish a foundry. Caslon's success was instantaneous. "From 1720 to 1780," says Timperley, "few works were printed with the types of any other foundry, and the editions of that interval will bear a successful comparison with those of any period prior or subsequent for typographical regularity and general respectability of appearance."

Caslon's first commission was to cut a font of Arabic. Then followed the modified Roman type face known by his name, first used in an edition of the works of John Selden published in 1726 by William Bowyer, a design which easily takes rank as the most popular type face ever produced. Caslon's first type specimen sheet, issued in 1734, exhibited the Caslon Roman and Italic cut in fourteen different sizes, together with other faces and a few "flowers." Soon Caslon types were in use all over Europe and in the newly settled Colonies across the Atlantic. Updike says of Caslon's types: "While he modeled his letters on Dutch types, they were much better; for he introduced into his fonts a quality of interest, a variety of design, and a delicacy of modeling which few Dutch types possessed. Dutch types were monotonous, but Caslon's fonts were not so. . . . To say precisely *how* Caslon arrived at his effects is not simple, but he did so because he was an artist. . . . Furthermore, his types are thoroughly English . . . they are the result of a taste typically Anglo-Saxon, and represent to us the flowering of a sturdy English tradition in typography."

We must go back to France of the eighteenth century to mention the work of the brothers Fournier, whose contributions to type-making have already g 304 Insert



A SPECIMEN

By WILLIAM CASLON, Letter-Founder, in Chiſwell-Street, LONDON.

ABCD
ABCDE
ABCDEFG
ABCDEFGHI
ABCDEFGHIJK
ABCDEFGHIJKL
ABCDEFGHIKLMN

French Cannon.

Quouſque tandem abutere, Catilina, pati-

Quouſque tandem abutere, Catilina,

DOUBLE PICA ROMAN.

Quouſque tandem abutere, Catilina, patientia noſtra? quamdiu nos etiam furor iſte tuus eludet? quem ad finem ſeſe effrenata jac-
ABCDEFGHJIKLMNOP

GREAT PRIMER ROMAN.

Quouſque tandem abutêre, Catilina, patientia noſtra? quamdiu nos etiam furor iſte tuus eludet? quem ad finem ſeſe effrenata jactabit audacia? nihilne te nocturnum præſidium palatii, nihil urbis vigiliæ, nihil timor populi, nihil con-
ABCDEFGHIJKLMNOPQRS

ENGLISH ROMAN.

Quouſque tandem abutêre, Catilina, patientia noſtra? quamdiu nos etiam furor iſte tuus eludet? quem ad finem ſeſe effrenata jactabit audacia? nihilne te nocturnum præſidium palatii, nihil urbis vigiliæ, nihil timor populi, nihil conſenſus bonorum omnium, nihil hic munitiſſimus
ABCDEFGHIJKLMNOPQRSTVUW

PICA ROMAN.

Melium, novis rebus ſtudentem, manu ſua occîdit. Fuit, fuit iſta quondam in hac repub. virtus, ut viri fortes acrioribus ſuppliciis civem perniciosum, quam acerbiſſimum hoſtem coërcerent. Habemus enim ſenatuſconſultum in te, Catilina, vehemens, & grave: non deeſt reip. conſilium, neque autoritas hujus ordinis: nos, nos, dico aperte, conſules deſumus. De-
ABCDEFGHIJKLMNOPQRSTVUWX

SMALL PICA ROMAN. No 1.

At nos vigeſimum jam diem patimur hebeſcere aciem horum autoritatis. habemus enim hujuſmodi ſenatuſconſultum, ve-

Double Pica Italick.

Quouſque tandem abutere, Catilina, patientia noſtra? quamdiu nos etiam furor iſte tuus eludet? quem ad finem ſeſe effrenata jac-
ABCDEFGHJIKLMNO

Great Primer Italick.

Quouſque tandem abutêre, Catilina, patientia noſtra? quamdiu nos etiam furor iſte tuus eludet? quem ad finem ſeſe effrenata jactabit audacia? nihilne te nocturnum præſidium palatii, nihil urbis vigiliæ, nihil timor populi, nihil con-
ABCDEFGHIJKLMNOPQR

Engliſh Italick.

Quouſque tandem abutere, Catilina, patientia noſtra? quamdiu nos etiam furor iſte tuus eludet? quem ad finem ſeſe effrenata jactabit audacia? nihilne te nocturnum præſidium palatii, nihil urbis vigiliæ, nihil timor populi, nihil conſenſus bonorum omnium, nihil hic munitiſſimus habendi ſe-
ABCDEFGHIJKLMNOPQRSTVU

Pica Italick.

Melium, novis rebus ſtudentem, manu ſua occîdit. Fuit, fuit iſta quondam in hac repub. virtus, ut viri fortes acrioribus ſuppliciis civem perniciosum, quam acerbiſſimum hoſtem coërcerent. Habemus enim ſenatuſconſultum in te, Catilina, vehemens, & grave: non deeſt reip. conſilium, neque autoritas hujus ordinis: nos, nos, dico aperte, conſules deſumus. Decrevit quondam ſenatus
ABCDEFGHIJKLMNOPQRSTVUWXYZ

Small Pica Italick. No 1.

At nos vigeſimum jam diem patimur hebeſcere aciem horum autoritatis. habemus enim hujuſmodi ſenatuſconſultum, verum-

Pica Black.

And be it further enacted by the Authority aforeſaid, That all and every of the ſaid Exchequer Bills to be made forth by virtue of this Act, or ſo many of them as ſhall from
ABCDEFGHIKLMNOPQRST

Brevier Black.

And be it further enacted by the Authority aforeſaid, That all and every of the ſaid Exchequer Bills to be made forth by virtue of this Act, or ſo many of them as ſhall from time to time remain undiſcharged and uncancelled, until the diſcharging and cancelling the ſame purſuant to this Act,

Pica Gothick.

𐌰𐍄𐍄𐌰 𐌿𐌽𐍃𐌰𐍂 𐌸𐌿 𐌹̈𐌽 𐌷𐌹𐌼𐌹𐌽𐌰𐌼 𐍅𐌴𐌹𐌷𐌽𐌰𐌹
𐌽𐌰𐌼𐍉 𐌸𐌴𐌹𐌽 𐌵𐌹𐌼𐌰𐌹 𐌸𐌹𐌿𐌳𐌹𐌽𐌰𐍃𐍃𐌿𐍃 𐌸𐌴𐌹𐌽𐍃
𐍅𐌰𐌹𐍂𐌸𐌰𐌹 𐍅𐌹𐌻𐌾𐌰 𐌸𐌴𐌹𐌽𐍃 𐍃𐍅𐌴 𐌹̈𐌽 𐌷𐌹𐌼𐌹𐌽𐌰

Pica Coptick.

Ϧⲉⲛ ⲟⲩⲁⲣⲭⲏ ⲁ̀ⲫϯ ⲑⲁⲙⲓⲟ̀ ⲛ̀ⲧⲫⲉ ⲛⲉⲙ ⲡⲕⲁϩⲓ⳾ ⲡⲓⲕⲁϩⲓ ⲇⲉ ⲛⲉ ⲟⲩⲁⲑⲛⲁⲩ ⲉ̀ⲣⲟϥ ⲡⲉ ⲟⲩⲟϩ ⲛ̀ⲁⲧⲥⲟⲃϯ ⲟⲩⲭⲁⲕⲓ ⲛⲁϥⲭⲏ ⲉϫⲉⲛ ⲫⲛⲟⲩⲛ ⲟⲩⲟϩ ⲟⲩⲡ̅ⲛ̅ⲁ̅ ⲛ̀ⲧⲉⲫϯ ⲛⲁϥⲛⲏⲟⲩ ϩⲓϫⲉⲛ ⲛⲓⲙⲱⲟⲩ⳾ ⲟ-

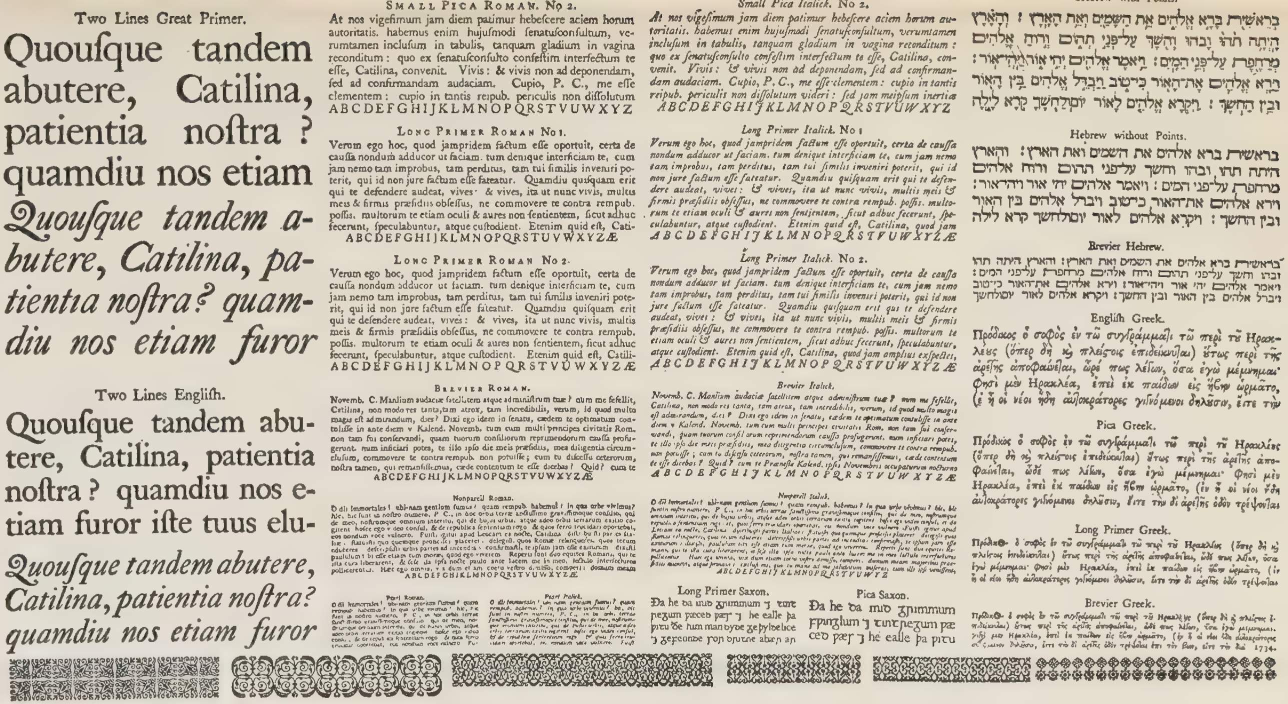
Pica Armenian.

Արշակ Թագաւոր՝ երկրի՝ և ծովու, որոյ անձն և պատկեր՝ որպէս և է իսկ մեր Աստուծոյ՝ իսկ բախտ՝ և պատահումն ՚ի վեր քան զա̄մ Թագաւորաց. և մտաց լայնութի̄, որչափ երկնի

English Syriack.

Pica Samaritan.

English Arabick



Two Lines Great Primer.

Quouſque tandem abutere, Catilina, patientia noſtra? quamdiu nos etiam

Quouſque tandem abutere, Catilina, patientia noſtra? quamdiu nos etiam furor

Two Lines Engliſh.

Quouſque tandem abutere, Catilina, patientia noſtra? quamdiu nos etiam furor iſte tuus elu-

Quouſque tandem abutere, Catilina, patientia noſtra? quamdiu nos etiam furor

SMALL PICA ROMAN. No 2.

At nos vigeſimum jam diem patimur hebeſcere aciem horum autoritatis. habemus enim hujuſmodi ſenatuſconſultum, verumtamen incluſum in tabulis, tanquam gladium in vagina reconditum: quo ex ſenatuſconſulto confeſtim interfectum te eſſe, Catilina, convenit. Vivis: & vivis non ad deponendam, ſed ad confirmandam audaciam. Cupio, P. C., me eſſe clementem: cupio in tantis reipub. periculis non diſſolutum

ABCDEFGHIJKLMNOPQRSTVUWXYZ

LONG PRIMER ROMAN No 1.

Verum ego hoc, quod jampridem factum eſſe oportuit, certa de cauſſa nondum adducor ut faciam. tum denique interficiam te, cum jam nemo tam improbus, tam perditus, tam tui ſimilis inveniri poterit, qui id non jure factum eſſe fateatur. Quamdiu quiſquam erit qui te defendere audeat, vives: & vives, ita ut nunc vivis, multis meis & firmis præſidiis obſeſſus, ne commovere te contra rempub. poſſis. multorum te etiam oculi & aures non ſentientem, ſicut adhuc fecerunt, ſpeculabuntur, atque cuſtodient. Etenim quid eſt, Cati-

ABCDEFGHIJKLMNOPQRSTUVWXYZÆ

LONG PRIMER ROMAN No 2.

Verum ego hoc, quod jampridem factum eſſe oportuit, certa de cauſſa nondum adducor ut faciam. tum denique interficiam te, cum jam nemo tam improbus, tam perditus, tam tui ſimilis inveniri poterit, qui id non jure factum eſſe fateatur. Quamdiu quiſquam erit qui te defendere audeat, vives: & vives, ita ut nunc vivis, multis meis & firmis præſidiis obſeſſus, ne commovere te contra rempub. poſſis. multorum te etiam oculi & aures non ſentientem, ſicut adhuc fecerunt, ſpeculabuntur, atque cuſtodient. Etenim quid eſt, Catili-

ABCDEFGHIJKLMNOPQRSTVUWXYZÆ

BREVIER ROMAN.

Novemb. C. Manlium audaciæ ſatellitem atque adminiſtrum tuæ? num me fefellit, Catilina, non modo res tanta, tam atrox, tam incredibilis, verum, id quod multo magis eſt admirandum, dies? Dixi ego idem in ſenatu, cædem te optimatum contuliſſe in ante diem v Kalend. Novemb. tum cum multi principes civitatis Rom. non tam ſui conſervandi, quam tuorum conſiliorum reprimendorum cauſſa profugerunt. num inficiari potes, te illo ipſo die meis præſidiis, mea diligentia circumcluſum, commovere te contra rempub. non potuiſſe; cum tu diſceſſu ceterorum, noſtra tamen, qui remanſiſſemus, cæde contentum te eſſe dicebas? Quid? cum te

ABCDEFGHIJKLMNOPQRSTVUWXYZÆ

Nonpareil Roman.

Pearl Roman.

Small Pica Italick. No 2.

At nos vigeſimum jam diem patimur hebeſcere aciem horum autoritatis. habemus enim hujuſmodi ſenatuſconſultum, verumtamen incluſum in tabulis, tanquam gladium in vagina reconditum: quo ex ſenatuſconſulto confeſtim interfectum te eſſe, Catilina, convenit. Vivis: & vivis non ad deponendam, ſed ad confirmandam audaciam. Cupio, P. C., me eſſe clementem: cupio in tantis reipub. periculis non diſſolutum videri: ſed jam meipſum inertiæ

ABCDEFGHIJKLMNOPQRSTVUWXYZ

Long Primer Italick. No 1

Verum ego hoc, quod jampridem factum eſſe oportuit, certa de cauſſa nondum adducor ut faciam. tum denique interficiam te, cum jam nemo tam improbus, tam perditus, tam tui ſimilis inveniri poterit, qui id non jure factum eſſe fateatur. Quamdiu quiſquam erit qui te defendere audeat, vives: & vives, ita ut nunc vivis, multis meis & firmis præſidiis obſeſſus, ne commovere te contra rempub. poſſis. multorum te etiam oculi & aures non ſentientem, ſicut adhuc fecerunt, ſpeculabuntur, atque cuſtodient. Etenim quid eſt, Catilina, quod jam

ABCDEFGHIJKLMNOPQRSTVUWXYZÆ

Long Primer Italick. No 2.

Verum ego hoc, quod jampridem factum eſſe oportuit, certa de cauſſa nondum adducor ut faciam. tum denique interficiam te, cum jam nemo tam improbus, tam perditus, tam tui ſimilis inveniri poterit, qui id non jure factum eſſe fateatur. Quamdiu quiſquam erit qui te defendere audeat, vives: & vives, ita ut nunc vivis, multis meis & firmis præſidiis obſeſſus, ne commovere te contra rempub. poſſis. multorum te etiam oculi & aures non ſentientem, ſicut adhuc fecerunt, ſpeculabuntur, atque cuſtodient. Etenim quid eſt, Catilina, quod jam amplius exſpectes,

ABCDEFGHIJKLMNOPQRSTVUWXYZÆ

Brevier Italick.

Novemb. C. Manlium audaciæ ſatellitem atque adminiſtrum tuæ? num me fefellit, Catilina, non modo res tanta, tam atrox, tam incredibilis, verum, id quod multo magis eſt admirandum, dies? Dixi ego idem in ſenatu, cædem te optimatum contuliſſe in ante diem v Kalend. Novemb. tum cum multi principes civitatis Rom. non tam ſui conſervandi, quam tuorum conſiliorum reprimendorum cauſſa profugerunt. num inficiari potes, te illo ipſo die meis præſidiis, mea diligentia circumcluſum, commovere te contra rempub. non potuiſſe; cum tu diſceſſu ceterorum, noſtra tamen, qui remanſiſſemus, cæde contentum te eſſe dicebas? Quid? cum te Præneſte Kalend. ipſis Novembris occupaturum nocturno

ABCDEFGHIJKLMNOPQRSTVUWXYZÆ

Nonpareil Italick.

Pearl Italick.

Long Primer Saxon.

Ða he ða mid ᵹrimmum ⁊ tint reᵹum ræced ƿæſ ⁊ he ealle þa ƿitu ðe him man dyde ᵹeþyldelice ⁊ ᵹeſtonde ƿon drihtne abæd an

Pica Saxon.

Ða he ða mid ᵹrimmum ſƿinᵹlum ⁊ tintreᵹum ƿæced ƿæſ ⁊ he ealle þa ƿitu

בְּרֵאשִׁית בָּרָא אֱלֹהִים אֵת הַשָּׁמַיִם וְאֵת הָאָרֶץ ׃ וְהָאָרֶץ
הָיְתָה תֹהוּ וָבֹהוּ וְחֹשֶׁךְ עַל־פְּנֵי תְהוֹם וְרוּחַ אֱלֹהִים
מְרַחֶפֶת עַל־פְּנֵי הַמָּיִם ׃ וַיֹּאמֶר אֱלֹהִים יְהִי אוֹר וַיְהִי־אוֹר ׃
וַיַּרְא אֱלֹהִים אֶת־הָאוֹר כִּי־טוֹב וַיַּבְדֵּל אֱלֹהִים בֵּין הָאוֹר
וּבֵין הַחֹשֶׁךְ ׃ וַיִּקְרָא אֱלֹהִים לָאוֹר יוֹם וְלַחֹשֶׁךְ קָרָא לָיְלָה

Hebrew without Points.

בראשית ברא אלהים את השמים ואת הארץ ׃ והארץ
היתה תהו ובהו וחשך על־פני תהום ורוח אלהים
מרחפת על־פני המים ׃ ויאמר אלהים יהי אור ויהי־אור ׃
וירא אלהים את־האור כי־טוב ויבדל אלהים בין האור
ובין החשך ׃ ויקרא אלהים לאור יום ולחשך קרא לילה

Brevier Hebrew.

בראשית ברא אלהים את השמים ואת הארץ ׃ והארץ היתה תהו
ובהו וחשך על־פני תהום ורוח אלהים מרחפת על־פני המים ׃
ויאמר אלהים יהי אור ויהי־אור ׃ וירא אלהים את־האור כי־טוב
ויבדל אלהים בין האור ובין החשך ׃ ויקרא אלהים לאור יום ולחשך

Engliſh Greek.

Πρόδικος ὁ σοφὸς ἐν τῷ συγγράμματι τῷ περὶ τοῦ Ἡρακλέους (ὅπερ δὴ καὶ πλείστοις ἐπιδείκνυται) οὕτως περὶ τῆς ἀρετῆς ἀποφαίνεται, ὡδέ πως λέγων, ὅσα ἐγὼ μέμνημαι· Φησὶ μὲν Ἡρακλέα, ἐπεὶ ἐκ παίδων εἰς ἥβην ὡρμᾶτο, (ἐν ᾗ οἱ νέοι ἤδη αὐτοκράτορες γιγνόμενοι δηλοῦσιν, εἴτε τὴν

Pica Greek.

Πρόδικος ὁ σοφὸς ἐν τῷ συγγράμματι τῷ περὶ τοῦ Ἡρακλέους (ὅπερ δὴ καὶ πλείστοις ἐπιδείκνυται) οὕτως περὶ τῆς ἀρετῆς ἀποφαίνεται, ὡδέ πως λέγων, ὅσα ἐγὼ μέμνημαι· Φησὶ μὲν Ἡρακλέα, ἐπεὶ ἐκ παίδων εἰς ἥβην ὡρμᾶτο, (ἐν ᾗ οἱ νέοι ἤδη αὐτοκράτορες γιγνόμενοι δηλοῦσιν, εἴτε τὴν δι᾽ ἀρετῆς ὁδὸν τρέψονται

Long Primer Greek.

Πρόδικος ὁ σοφὸς ἐν τῷ συγγράμματι τῷ περὶ τοῦ Ἡρακλέους (ὅπερ δὴ καὶ πλείστοις ἐπιδείκνυται) οὕτως περὶ τῆς ἀρετῆς ἀποφαίνεται, ὡδέ πως λέγων, ὅσα ἐγὼ μέμνημαι· Φησὶ μὲν Ἡρακλέα, ἐπεὶ ἐκ παίδων εἰς ἥβην ὡρμᾶτο, (ἐν ᾗ οἱ νέοι ἤδη αὐτοκράτορες γιγνόμενοι δηλοῦσιν, εἴτε τὴν δι᾽ ἀρετῆς ὁδὸν τρέψονται

Brevier Greek.

Πρόδικος ὁ σοφὸς ἐν τῷ συγγράμματι τῷ περὶ τοῦ Ἡρακλέους (ὅπερ δὴ καὶ πλείστοις ἐπιδείκνυται) οὕτως περὶ τῆς ἀρετῆς ἀποφαίνεται, ὡδέ πως λέγων, ὅσα ἐγὼ μέμνημαι. Φησὶ μὲν Ἡρακλέα, ἐπεὶ ἐκ παίδων εἰς ἥβην ὡρμᾶτο, (ἐν ᾗ οἱ νέοι ἤδη αὐτοκράτορες γιγνόμενοι δηλοῦσιν, εἴτε τὴν δι᾽ ἀρετῆς ὁδὸν τρέψονται ἐπὶ τὸν βίον, εἴτε τὴν διὰ 1734.

Reduced facsimile of Caslon's first specimen sheet, issued in 1734. Actual size of type form, 14¼×18 inches.

been outlined. Pierre Simon Fournier (*le jeune*), the more distinguished of the two, who sometimes reversed the order of his given names, produced a decorated capital type face which was popular in his time, has lately been revived, and is at present enjoying a merited popularity.

John Baskerville, the second great name in English type-founding, was the only English designer who ever threatened Caslon's supremacy. Baskerville was first a writing master and later a manufacturer of japanned articles—snuff boxes and the like—from the sale of which he amassed considerable wealth. He retired from this business to devote himself to printing. Not being able to obtain paper and type as he wanted them, he established in Birmingham a type foundry, paper mill, and printing office, and he also made his own printing ink. After seven years of experiments, Baskerville in 1757 produced his first book, which met with favor. It was severely plain in style, as were others of his books which followed it. Indeed, Baskerville seldom used ornamentation.

In some quarters Baskerville's work evoked enthusiastic praise. "The typography of Baskerville," said Dibdin, "is eminently beautiful. . . . He united, in a singularly happy manner, the elegance of Plantin with the clearness of the Elzevirs. . . . In his Italic letter, whether capital or small, he stands unrivalled; such elegance, freedom, and perfect symmetry being in vain to be looked for among the specimens of Aldus and Colinaeus." Pollard, however, takes a different view: "There is always a possibility that an enthusiast may be misguided; and the verdict of to-day is that this was the case with Baskerville, who naturally approached printing from the standpoint of his old occupation as a writing master, making his down-strokes thick and his up-strokes thin, with results which his modern critics consider restless." This, I believe, is rather severe criticism. Baskerville's faces were not greatly different in design from those of Caslon. Updike quotes Pierre Fournier as saying: "His types are cut with much spirit, his Italic being the best in any foundry in England, though the Roman characters are a little too broad."

Benjamin Franklin was one of Baskerville's patrons, his name appearing in the *Virgil* of 1757 as a subscriber for six copies. Franklin and Baskerville were in frequent correspondence. In 1760 Franklin wrote of an amusing prank he had played upon a Caslon enthusiast. This gentleman in discussing the two type-founders said that Baskerville's types were so badly designed that it hurt his eyes to read them. Franklin produced a specimen sheet of Caslon types but with Caslon's name torn off, with the remark that it was from Baskerville, and asked his caller to point out wherein the design was at fault. The caller unwittingly upset his own arguments to such a degree that Franklin saved him from the embarrassment of exposure. Baskerville continued to print until his death in 1775.

The year of Baskerville's death witnessed the entry into typography of a new influence which from some points of view was to bear a striking similarity to that of Baskerville. Giambattista Bodoni, who had begun to print at Parma, Italy, in 1768, produced in that year a work entitled *Epithalamia Exoticis Linguis Reddita*, which attracted general attention because it exhibited the alphabets of some twenty-five different languages. As a designer of type Bodoni did not pattern after any of the old-style designs but produced a new and more condensed letter with a narrow, compressed face and longer ascenders and descenders. His type faces, though widely copied during and after his lifetime, later fell into disfavor but have been in recent times revived and extensively used.

The change in typographic style that came with the passing of the eighteenth century was principally in the direction of deterioration. It reached its lowest level, particularly in America, in the latter half of the nineteenth century. Seemingly everything that was bad in design was applied to type. The desire apparently was to make the shape of the letter different, without regard to the artistic result. It is said that one type-founder's specimen book exhibited 750 different shapes of alphabets.

A sharp revulsion was inevitable, and it came under the influence of William Morris at the Kelmscott Press in England and of Will Bradley at the Wayside Press in America. Both worked at about the same time but from strikingly different points of view. Decoration was the prevailing note of Morris' remarkable craftsmanship; to him every page was a typographic picture. Bradley worked along more simple lines. He produced few books, his work being principally confined to stationery, pamphlets, booklets, etc. He followed usually the Colonial style in composition, in which a single face, a Roman (or a Roman and Italic combined, to which was sometimes added a touch of black letter), was made to serve. Although Morris designed types and Bradley for a considerable time was connected in an important capacity with the American Type Founders Company, the chief distinction of neither came from the creation of type faces. It was through their work in showing how type should be used that they exercised a lasting influence upon typography.

These modern times have produced a man, however, who, in addition to being a printer of distinction, takes a high place in the ranks of type-designers, particularly of display types. He is Frederic W. Goudy, whose facility in producing beautiful alphabets is a constant source of remark. His work is too familiar to require extended description and too recent for adequate appraisal, which can come only with the passing of time. There can be no ground, however, on which to take issue with the assertion that Goudy's influence upon the history of typography will be enduring.

CHAPTER XXIV

THE STORY OF ENGRAVING

THE first wood-engravers, like the first paper-makers and the first printers from movable types, were Orientals. Thomas Francis Carter in *The Invention of Printing in China* gives the date of the first known engraving as 770, but although he believes the art originated in China, this eighth-century block was engraved in Japan. The print made from it was one of a million charms ordered by the Empress Shotoku to ward off a smallpox epidemic. Specimens of the charms are still preserved and are well authenticated. "For a century and a half before the making of the first block-printed charms," says Professor Carter, "Japan had been undergoing a process of complete transformation under the influence of China. A steady succession of Buddhist missionaries from China poured into Japan, and a steady succession of Japanese students went to China for study and on their return brought about sweeping changes in the customs of their native land, bringing Japan gradually abreast of what was then the world's most cultured country." It was during this counter movement, Professor Carter believes, that the Japanese learned from the Chinese how to print from engraved blocks.

A discovery of great importance to the history of printing and engraving was made in the Chinese province of Kansu, on the border of the desert of Turkestan, in 1900. Near the city of Tun-kuang are what are called the Caves of the Thousand Buddhas. In one of these was discovered a sealed chamber which on being opened yielded, along with several thousand manuscripts, four books, one of them with folded leaves and three in roll form, all printed from engraved blocks. One of the prints, done in the ninth century, is in the Metropolitan Museum in New York. In the colophon of one of the books, which is now in the British Museum, is the statement: "Printed on May 11, 868, by Wang Chieh, for free general distribution, in order in deep reverence to perpetuate the memory of his parents," which designates it as the world's oldest book. In the chamber were found also several scores of prints, from engraved blocks. The fact that the recovered manuscripts are dated from 406 to 997, and the further fact that no reference occurs in Japanese history to engraving or printing prior to 987, form the basis for Professor Carter's belief that engraving in China antedated that in Japan.

In Europe the goldsmiths were the first engravers. They used metal exclusively, but it was only a step from metal to wood. "The goldsmiths," says George E. Woodberry in *A History of Wood Engraving*, "were the only persons who had by them all the means for taking an impression—the engraved metal plate, iron tools, burnishers for rubbing off a proof, blackened oil, and paper which they used for tracing their designs." W. J. Linton gives it as his opinion that some of the first engraving for printing purposes was done on metal and that it was engravers who made the change in the material used.

Passavant is authority for the statement that as early as the twelfth century stamps were used for initials in manuscripts and that prints so made have been preserved in Munich. Linton found illuminated manuscripts in which there was an "admixture of stencil and stamp."

There is a record of a lawsuit in Bruges from which it is evident that wood-cutters were at work there before the year 1400. Another early record which has been preserved is an inventory of the possessions of Jean de Hinsberg, Bishop of Liège (1419–1455), and his sister, a nun in the Convent of Bethany, near Thechlin, two entries in which are as follows: *Unum instrumentum ad imprimendas scripturas et ymagines* (one instrument for printing writings and pictures); and *Novem printe lignee ad imprimendas ymagines cum quatuordecim aliis lapideis printis* (nine wooden blocks for printing pictures and fourteen other stone blocks).

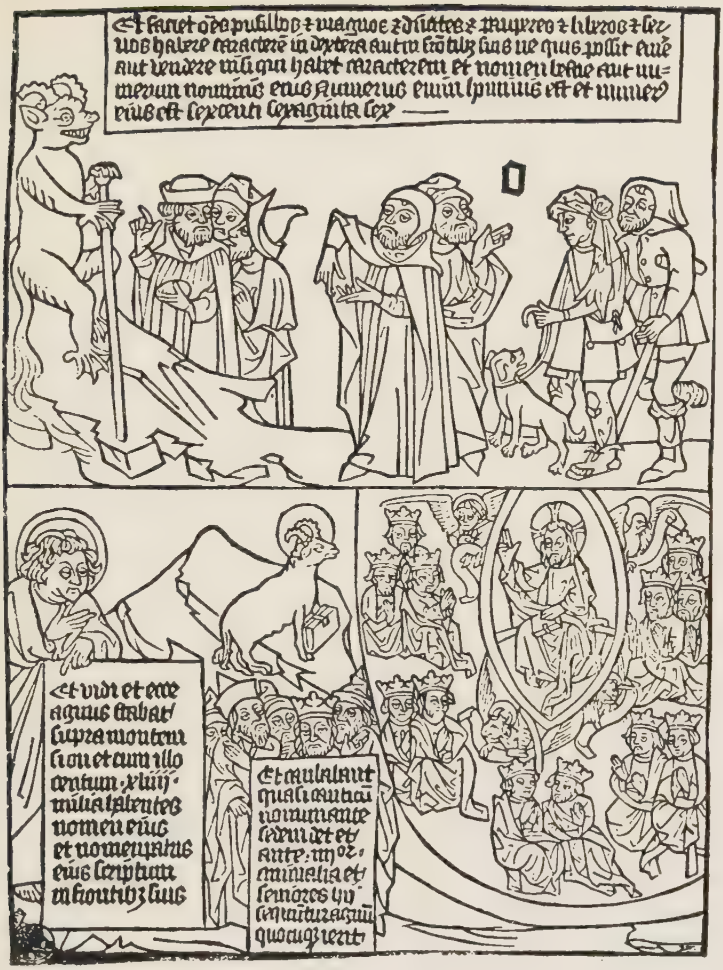
It is more than likely that much of the first engraving on wood was done to mark the outlines of playing cards which were afterwards filled in in color by hand. Mention of a *Kartenmacher* (card-maker) appears in the records of a convent situated at Augsburg, Germany, in 1418. The well-known print of the Brussels Madonna is dated 1418, which date Linton questions.

The oldest known dated print made from a wood-engraving in existence, dated 1423, was found pasted inside the cover of a manuscript in the library of a convent at Buxheim, near Memmingen, in Suabia, about fifty miles from Augsburg. It is now in the Rylands Library in Manchester, England. It depicts St. Christopher bearing the Christ Child across a stream. The print was colored by hand.

The block books, so-called because each page was printed from a single block of wood, were, of course, the work of wood-cutters. Few block books have survived, and no facts of their production, such as date or name of place or engraver or printer, are known.

John Gutenberg, the first printer, made no use of wood-engravings to embellish his type-printed pages. It remained for two of his disciples and successors, Peter Schoeffer at Mainz and Albert Pfister at Bamberg, to lead in the use of woodcuts, and singularly their example was not followed until some years after they had set it.

Peter Schoeffer made only decorative use of woodcuts. The first of the books from his Press in which they appear possesses the additional distinction of being the first printed book to bear a date and the first book printed in more than one color. It is the Psalter printed at Mainz in 1457. The initial letter of the first chapter is a magnificently decorated capital "B" printed in blue and red. Much speculation as to how it was printed, whether by successive impressions on the press or by impressions rubbed by hand, has



Et faciet oēs pusillos ⁊ magnos ⁊ diuites ⁊ pauperes ⁊ liberos ⁊ ser
uos habere caracterē in dextera aut in frōtibz suis ne quis possit emē
aut vendere nisi qui habet caracterem et nomen bestie aut nu=
merum nominis eius Numerus enim hominis est et numer9
eius est sexcenti sexaginta sex

Et vidi et ecce
agnus stabat
supra montem
sion et cum illo
centum .xliiij.
milia habentes
nomen eius
et nomen patris
eius scriptum
in frontibz suis

Et cantabant
quasi canticū
nouum ante
sedem et
ante .iiij.or
animalia et
seniores hij
sequūtur agnū
quocūqz ierit

Page from the *Apocalypsis*, a block book, showing the earliest form of woodcutting.

been indulged in by writers in the bibliographical field, but without definitely settling the matter. Schoeffer printed a number of other books in which engraved initials appear.

Four years after Peter Schoeffer showed the way, Albert Pfister, at Bamberg, made the first use of woodcuts to illustrate the text of a type-printed book. On February 4, 1461, Pfister produced the first of two editions of Boner's *Edelstein*, a collection of German fables, in which there are 101 small illustrations crowded into 28 leaves. Pfister printed seven picture books, two with and five without dates; in the four books there are 201 cuts.

Some details have been preserved of the engravers who worked with the first printers, but the record is scanty and not clear. Sometimes, as we have seen, the printers made their blocks serve several purposes. A portrait of a personage or a map of a city in one book might do duty over a totally different caption in another book. Sometimes even the duplication occurred in the same book. Many blocks traveled from one shop and from one city to another.

Günther Zainer, Augsburg's first printer, saw, as few of his contemporaries seemed to see, the opportunity afforded by pictures to make type printing more effective, but he had difficulty in getting along with the makers of the blocks. It is on record that a guild of wood-engravers opposed the admission of Zainer and John Schüssler, another printer, to the privileges of a burgess, and that the two printers were able to obtain the privilege only after intercession with the magistrate in their behalf by the powerful Abbot of SS. Ulrich and Afra, Melchior of Stamham, an ecclesiastic who took a special interest in the new art of typography. By the terms of the compromise effected, Zainer and Schüssler agreed to obtain their woodcuts from the members of the guild. There is a pronounced inferiority in the cuts in Zainer's early work in Augsburg, owing doubtless to the fact that he did the cutting himself or employed amateurs to do it.

Ulrich Zell printed at Cologne a book entitled *Horologium Devotionis*, containing 36 cuts of scenes from the life of Christ, which bears no date but is ascribed to 1470. Probably about the same year Jodoc Pflanzmann printed at Augsburg the first illustrated German Bible. Each book in the Bible, which is undated, is headed by a small cut in outline which was intended to be filled in by a colorist. Günther Zainer's first illustrated book with a date (1471) was a translation of Jacobus de Voragine's *Legenda Aurea*, containing 234 cuts. It was soon followed by others; of Zainer's total of about a hundred books, at least twenty were illustrated. John Sensenschmidt printed at Nuremberg in 1472 a German Bible containing large initial letters into which illustrations were introduced.

The best-known book other than a Bible to be issued in Germany with wood blocks which actually attempted to illustrate the text was Breydenbach's *Pilgrimage*, printed by Erhard Reuwich at Mainz in 1486. It is a folio book of 148 leaves, five of which are extended by additions pasted on them to show large maps, the map of Venice being 64½ inches in length. There are two views occupying two pages each, nine other illustrations, and two initials; there occur also spaces for other woodcuts not filled in. The book was written by Bernhard von Breydenbach, a Canon of the Cathedral of Mainz. In 1483 he led a pilgrimage to the Holy Land in which were included two members of the nobility and Erhard Reuwich, a painter. On Breydenbach's return he wrote an account of his travels and employed Reuwich to illustrate it. Reuwich made the drawings but probably did not engrave the blocks. He may not have been the actual printer of the book either, but he superintended the work through all its stages and is credited with its production.

In addition to its priority Breydenbach's *Pilgrimage* is notable as signalizing an important development in engraving, that of cross-hatching, that is, the crossing of lines to indicate degrees of light and shade. William Morris said the *Pilgrimage* contained the best-executed illustrations to be found in any early book. It was one of the first books to contain engravings that could be definitely connected with the name of the artist responsible for them, the first to attempt to represent persons and places in a lifelike way, and the first with folding illustrations.

The first book to contain work by a known engraver is an edition of Ptolemy printed by Arnold Buckinck at Rome in 1478. It contains maps engraved by Con-

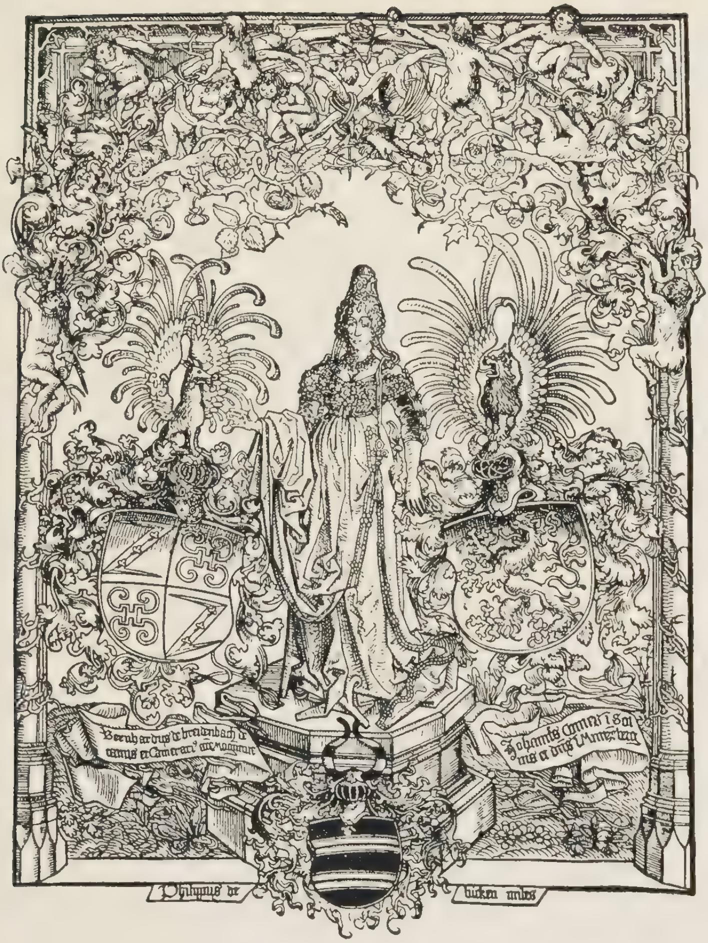


Illustration from Breydenbach's *Pilgrimage.* Printed by Erhard Reuwich, Mainz, 1486. The earliest book to show engravings with cross-hatching.

rad Sweynheym, who died before the book was completed.

Anthony Koberger of Nuremberg issued in 1491 another great illustrated book, Stephan's *Schatzbehalter*, containing 96 full-page illustrations designed by Michael Wohlgemuth, master and teacher of Albert Dürer, some of which Wohlgemuth signed with his initial, "W."

So far as quantity is concerned, the real era of production in wood-engraving was marked by the appearance in 1493 of the "Nuremberg Chronicle," some details of the illustrations in which are given in an earlier chapter. Michael Wohlgemuth and his stepson, William Pleydenwurff, made the drawings but not, as is sometimes said, the cuts. Albert Dürer may have had a 'prentice hand in some of the drawings. They are not of a high standard of quality.

The "Nuremberg Chronicle" records on leaf 285 the discovery of the country that was later named America, awarding the honor of sharing in it to Martin Behaim, a citizen of Nuremberg, to whose memory a statue was subsequently erected. Behaim was a geographer and navigator of greater pretensions than recent investigation seems to justify, but he is entitled to a place in history because he was the originator of the first terrestrial globe, depicting the earth's land and water. It is still in existence. The statement is made in the "Chronicle" that an expedition was sent in 1483 by Juan II, King of Portugal, in galleys under the command of Diego Cano, a Portu-

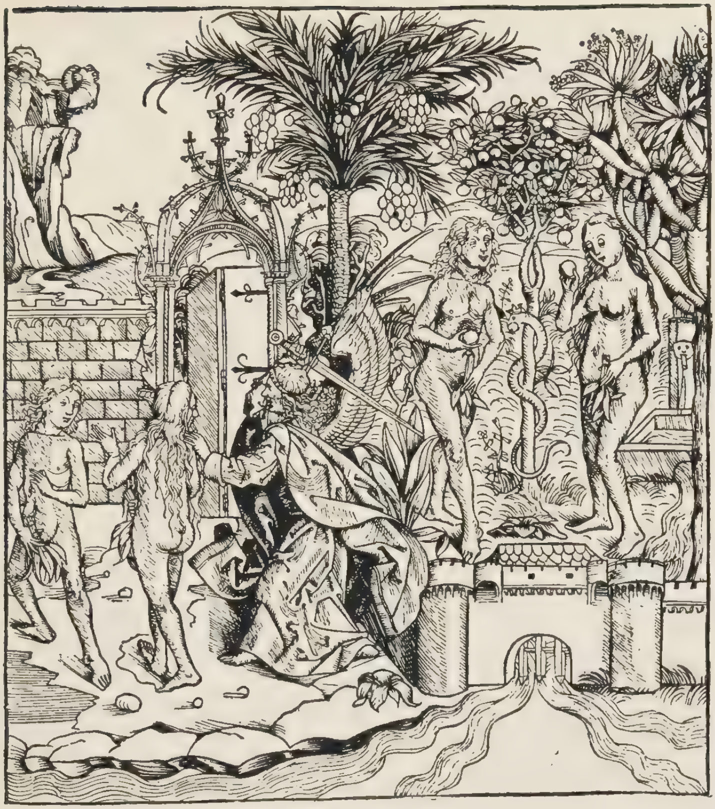


Illustration from the "Nuremberg Chronicle." Printed by Anthony Koberger, Nuremberg, 1493. Illustrating the rude vigor of early German engraving.

guese, and Martin Behaim of Nuremberg, to sail across the seas; that eventually they reached the New World and after twenty-six months made a safe return. In the manuscript of the "Chronicle," which has been preserved, the passage relating to Behaim appears as a marginal addition, for which he is believed to have been responsible.

Italy's best-known illustrated book of the fifteenth century is Colonna's *Hypnerotomachia Poliphili*, printed by Aldus Manutius at Venice in 1499, referred to in a previous chapter. Its author leads his heroine through woods peopled with strange beasts along paths in which they are guided by nymphs to the court of a queen. This gave opportunity for a wide variety of illustrations, which are divided as follows: 86 relate to mythology and history, 54 represent processions and emblematic figures, 36 are architectural and ornamental subjects; and 16 are statues and vases. The illustrations, with few exceptions, are unmarked, the exceptions carrying a small "b." They are, as a rule, of high quality, so high, indeed, that the names of most of the well-known artists of the time have been associated with them, but in no case with definite authority.

An effect known as *criblé* was introduced about the end of the fifteenth century. A block so engraved looks as if it had been shot full of small holes. *Criblé* for which probably metal and not wood was used, began to disappear with the introduction and perfection of cross-hatching. It was but little used in the

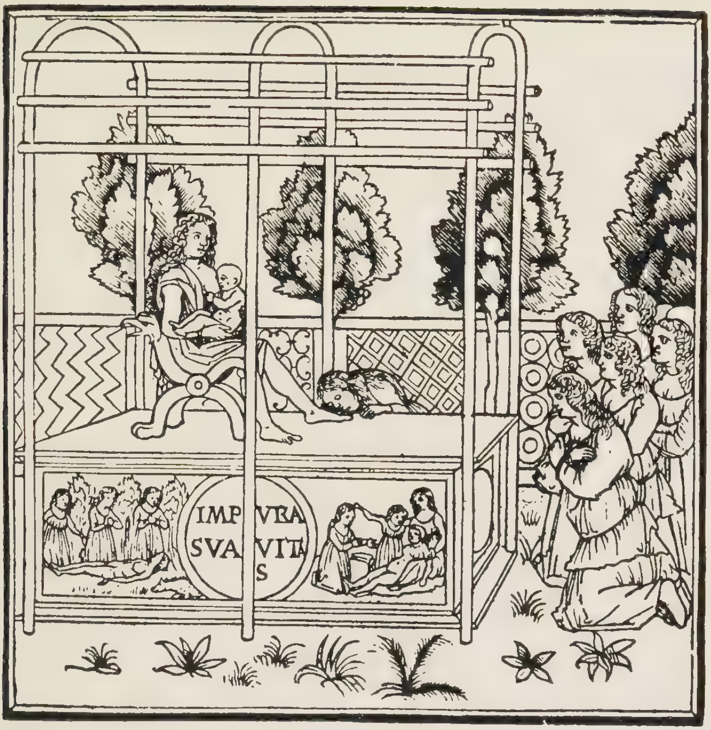


Illustration from the *Hypnerotomachia Poliphili.* Printed by Aldus, Venice, 1499.

sixteenth century, when wood-engraving reached a high level which has never been surpassed.

Wood-engraving is now done with a graver, or burin, as it is usually called. The modern engraver makes his incisions away, as with a plow, from himself, and the end of the grain of the block forms his printing surface. The early wood-cutters, however, used an ordinary knife, which they drew toward themselves, and they worked on the side of the block instead of the end. Until the publication of Breydenbach's *Pilgrimage* they attempted nothing in the way of light and shade. Every part of the block cut away appears white, every part left uncut appears black.

No great change came into the art until the advent in England of Thomas Bewick (1753–1828), who introduced, to indicate tone and color, "white lines" on a black background. He was not the first to use the method; it appears in fifteenth-century German metal cuts; but not until Bewick's use of it was it followed by general adoption. He was responsible also for the introduction of the burin and the transfer of the engraved printing surface from the side to the end of the block. This latter innovation was an advance technically, but it had the disadvantage of limiting the size of the block. This disability was met about 1860 by Charles Wells in England, who invented a system of compounding by which many small blocks were joined together into a single large one. Wells' invention made the introduction of wood-engraving into the newspaper field a practicality.

In the early stages of wood-engraving the artist drew his design with pen or pencil upon the block, and the engraver cut away the parts not covered by it. When the brush came into play and delicately shaded effects were demanded, the work became more complicated and a higher order of engraving skill was required, for the reason that the cutter destroyed the design as he worked. Since the introduction of photography it is the practice to photograph the design upon the block, so that now the engraver can work upon the photographed block with the original constantly before him for guidance.

Inasmuch as this chapter has to do with the engraving of relief plates only, the next step to be considered is the photo-mechanical processes. In the making of printing plates by photo-engraving the etching is done with chemicals in combination with photography. The surface of the sensitized plate is exposed through a glass screen on which lines are crossed at right angles, the density of the lines varying according to the requirements of the paper upon which the engraving is to be printed. When the plate is etched, the acid attacks the minute areas of the plate that were not protected by the dots on the screen through which the exposure to the light was made, the dots so protected remaining in relief.

The idea of making light and chemicals do the work previously done by the burin in the hand of a craftsman seems first to have occurred to Joseph Nicéphore Niepce, of Châlons-sur-Saône, France, as early as 1818. Daguerre's invention in 1839 of the daguerreotype, a picture made in a camera on a copper plate, was a further advance toward photoengraving. Various experiments followed in different countries by several people: Gillot in Paris, Talbot in England, Von Egloffstein and Ives in Philadelphia, the Leggos in Montreal, and Horgan in New York. The *New York Daily Graphic* for December 2, 1873, contained a halftone by William A. Leggo printed lithographically, the first to appear in a newspaper. Frederic E. Ives made the first halftone relief printing plate at Cornell University in 1878.

The lines of the screen in the first lithographic halftone all ran in the same direction; the exposure, therefore, was not made through a cross-line screen. The making of halftone plates with cross-line screens by the process patented by Frederic E. Ives of Philadelphia began in 1881, although Ives' patents were not taken out until 1885–6. Meisenbach in Germany, often credited with the invention of the halftone process, did not begin until 1883. Ives' work in trichromatic halftone printing also began in 1881. William Kurtz of New York did much to perfect three-color printing and photography in colors.

Long runs of presswork are seldom made from engravings, but from electrotypes. Experiments leading to the discovery of the principle of the electrotyping process began early in the nineteenth century and came to fruition about 1840. The record is somewhat obscure. The names usually associated with the invention are Professor Jacobi of St. Petersburg, Thomas Spencer of Liverpool, J. C. Jordain of London, and Joseph A. Adams of New York.

Stereotyping was of earlier origin, having been invented by William Ged (1690–1749) of Edinburgh, who began to experiment in 1725. David Bruce brought stereotyping to America in 1812.

CHAPTER XXV

PAPER

THE invention of paper-making antedated that of printing from movable types, and in the history of printing it is second in importance only to typography. There could not be much successful printing without paper, although several other materials had previously served for the arts of record. Early in the history of civilization men made records upon leaves and the white inner bark of trees, and later they found a method of preparing from a reed found on the banks of the rivers flowing into the Mediterranean Sea a substance that offered a satisfying and durable writing surface. This material they called papyrus, from the name of the reed itself, and its serviceability is attested by the fact that many specimens, some of them thousands of years old, still exist. Later still came parchment, made from the skins of young animals, which is still used.

These various stages are reflected in the nomenclature of the printing craft. *Folio* is Latin for "leaf." The bark of the lime tree was called *liber*, which is also the Latin for "book"; our word came from the Anglo-Saxon *boc* (beech tree). "Volume" comes from the Latin *volumen*, a roll; and "parchment" from Pergamus, the name of the country of its origin.

The invention of paper-making, like that of printing from movable types, has to be credited to the Chinese. Ts'ai Lun, who was born in the first century, seems indisputably to be entitled to the honor of the invention. Paper is next heard of as being used by the Arabians at Bagdad and Samarkand in the eighth century and by the Moors in Spain in the twelfth century.

From Spain the art of paper-making spread over Europe. France seems to have been the first country to adopt it, for there is a record of a mill at Hérault in 1190. The year 1276 is usually given as the date of the introduction of paper-making into Italy. It occurred at Fabriano, which is the great name in early Italian paper history. Several mills, owned by separate individuals or firms, were operated there.

Ulman Stromer was the first known German paper-maker, although not the first person to make paper in Germany. Stromer began in 1360 to write the first work on paper-making, and some years after that date, probably in 1390, he began to make paper at Nuremberg. Munsell says of him: "He employed two rollers, which set eighteen stampers in motion; but when he would add another roller, he was opposed by the Italians whom he employed, who would not consent to the enlarging of his manufacture; but they were imprisoned by the magistrates, when they submitted, renewing their oaths."

Wynken de Worde in *De Proprietatibus Rerum*, a book printed by him at Westminster in 1495, makes mention of England's first paper-maker. The reference is to John Tate the younger, the elder being Lord Mayor of London. Tate's establishment, which was known as the Sele Mill, was located at Stevenage, Hertfordshire. James Whatman was England's best-known paper-maker. He learned the art while in the diplomatic service in Holland, began his work at Maidstone in 1760–5, and rose to great eminence.

William Rittenhouse was the first paper-maker to set up in America. In 1690, with four partners, he built a mill on the banks of a stream called Paper Mill Run, which emptied into Wissahickon Creek in Germantown, now incorporated in Philadelphia. The partners were William Bradford, the printer, Robert Turner, Thomas Tresse, and Samuel Carpenter. Carpenter, Turner, and Tresse were men of wealth whose function was to furnish the capital required. Rittenhouse was a Hollander, born at Broich, near Mulheim, in 1644. Although a practical paper-maker, he was also a Mennonite minister and later became the first bishop of that sect in America. Rittenhouse eventually became sole owner of the paper mill. It was destroyed by a freshet in 1701 and rebuilt the following year. The site is now a part of Fairmount Park. William De Wees built the second paper mill in America near-by on the Wissahickon Creek in 1710.

A paper mill was established at Elizabethtown, New Jersey, but when or by whom is not known. William Bradford, who in the meantime had removed from Philadelphia to New York, bought it in 1728 and conducted it for a number of years.

The first paper mill in New England was started in Boston in 1728, ninety years after the first Press had been set up by Stephen Daye for the widow Glover at Cambridge, just across the Charles River. The undertaking involved a number of names celebrated in American history: Daniel Henchman, bookbinder, publisher, and bookseller; Thomas Hancock, Henchman's son-in-law, also a bookseller and stationer and uncle of John Hancock of Revolutionary fame; Benjamin Faneuil; Gillam Phillips; and Henry Deving. Deving was the first superintendent. He was later succeeded by Jeremiah Smith, who in 1741 became sole proprietor of the mill.

Paper has been described as "an aqueous deposit of cellulose." Cellulose is vegetable fiber, the basis of the woody structure of plants. Its chief commercial sources for paper-making are certain kinds of pulped wood and linen and cotton rags. After a grinding or cutting and cleansing process by which the fiber is reduced to tiny particles, it is suspended in water, the fluid being of the consistency and appearance of milk. A flat wire mold is dipped into and below the surface of the fluid; when it is raised, the water runs off, leaving a thin coating upon the surface of the mold, which when dried and pressed becomes a sheet of paper. The fluid in its original state is about 98 per cent water and two per cent fiber.

For nearly seventeen hundred years after Ts'ai Lun invented paper-making, it was produced practically as he made it. Improvements were effected in the methods of cleaning and cutting, or "stamping," the rags, but until the end of the eighteenth century every paper-maker dipped his molds and made his sheets by hand.

In 1798 Louis Robert, a clerk in the employ of the Didots at the Essonne Paper Mills in France, invented a machine to replace hand labor. Political troubles prevented development of the invention at home, and it was taken to England, where Henry and Sealy Fourdrinier, prominent stationers and paper manufacturers, purchased it. They continued experimenting and in 1803 erected a machine at Frogmore, Hertfordshire, which successfully produced a sheet of paper. Their name and not that of Louis Robert has always been associated with the machine, but there is not in this all the injustice there seems. Although Robert furnished the idea, the Fourdriniers carried it through to practicability and ruined themselves financially in the process. They stated before Parliament in 1807 that they had spent 60,000 pounds which for those days was a large sum. It was not until 1815 that paper was manufactured by machine in France.

The watermarking of paper is a European device; the Orientals do not practice it. The earliest known date of the use of watermarks is 1282. The first Fabriano mark appeared in 1293. For a time each sheet bore the full name of the maker and the date of its manufacture; later only initials were used, and these gave way to designs of birds, fishes, flowers, armorial bearings, etc. John Tate's design was an eight-pointed star within a double circle. Sometimes the design indicated its user, as, for instance, the crossed keys or cardinal's hat in high ecclesiastical circles. Occasionally it illustrated a sentiment: Henry VIII of England expressed his hatred for the Pope by a watermark in the royal stationery of a hog with a mitre. At the time of the downfall of Charles I the mark of the royal arms was replaced by the familiar cap and bells; this was called "foolscap," and the term was later used to designate a particular size of sheet.

Until the middle of the eighteenth century all paper molds were made by stretching fine wires side by side over a wooden frame. The paper produced on a mold so made is marked by the wires and is known as "laid" paper. In 1750 John Baskerville devised a mold in which the wire covering is woven on a loom in the same manner as cloth. Its product is known as "wove" paper.

Surface finish is the quality by which grades of paper are commonly designated. "Machine finish" is the ordinary finish imparted to a sheet during its passage through the machine. "Antique finish" is a rougher surface. The materials from which antique-finish paper is made are specially selected, and the pressure of the rolls of the machine upon the sheet is lessened; the result is a soft, bulky texture which takes relief printing impression easily. "Supercalendered" paper has been passed after leaving the machine between rolls that subject it to pressure and thereby smooth and harden and in a sense polish it. "Coated" paper is made by covering the sheet as it comes from the machine with a coating of white clay which fills up all the inequalities and gives a smooth, hard, polished surface.

CHAPTER XXVI

THE EVOLUTION OF THE PRINTING PRESS

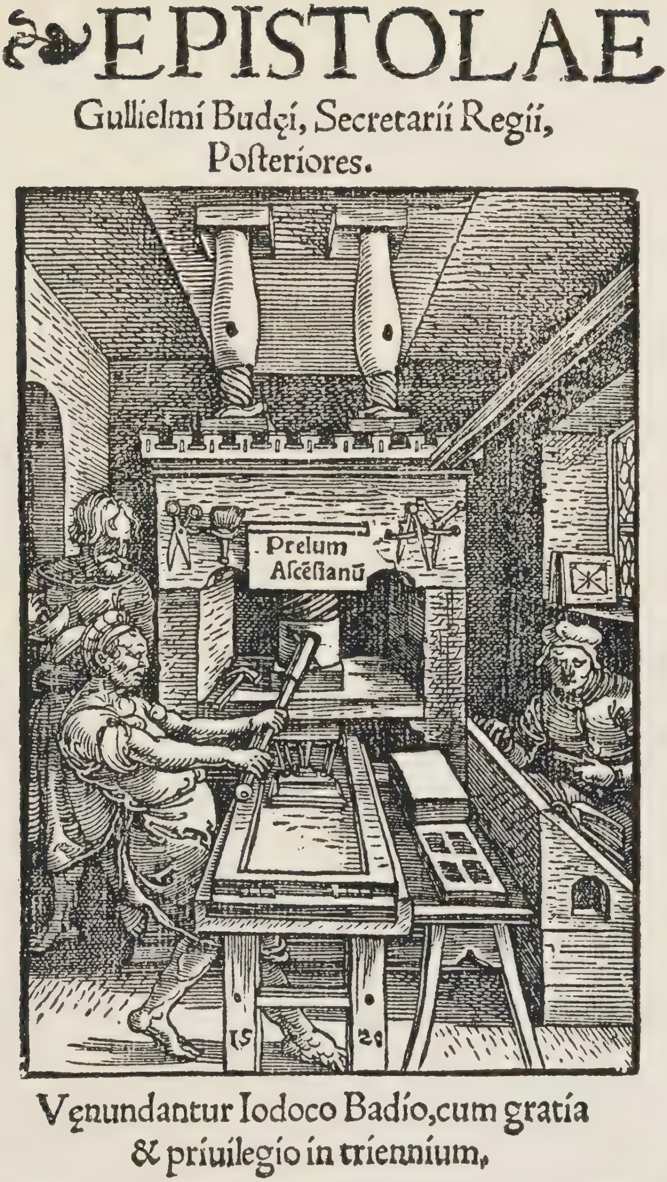
THERE are three possible methods of applying the power needed to make printed impressions: one is by rubbing; the second, by a squeeze, or "dwell," and the third, by a rotary device, such as a roller. All three have been employed in printing.

The Chinese, the pioneer printers, used the first method. They printed from blocks, two pages at a time, on paper of light texture, and the pressure was applied with a brush or a rubber like the Japanese "baren." The leaf was then folded with the blank pages inside the fold, and the binding was done with the loose edges inward. Old Chinese books have the appearance of a present-day volume with uncut edges.

The second method came into vogue when block-book printing began in Europe. The first European printer, whoever he may have been, found ready to hand a press with which to print. It was the wooden cider press, operated by a screw and lever. Through the center of the screw was a hole into which the lever was inserted. The head of the screw pointed downward, and as the screw was turned, it pushed against the platen and applied the necessary pressure on the form beneath it. The press reached from floor to ceiling and thus had the necessary strength and stability.

Willem Janszoon Blaeu (1571–1638), a map-maker of Amsterdam, Holland, is commonly credited with having made the first improvements in the printing press, although the record as to just what they were is not definite. If the early printers had been content to wait a long time for improvements, their successors were equally slow in adopting them. Joseph Moxon, writing in 1683, said: "There are two sorts of *Presses* in use, viz.: the old fashion and the new fashion; the old fashion is generally used here in England, but I think for no other reason than because many *Pressmen* have scarce reason enough to distinguish between an excellently improved invention, and a makeshift slovenly contrivance, practised in the minority of this Art." A hundred years more seem to have brought little change in this condition, for in the *History of the Origin and Progress of Printing*, by Philip Luckombe, published in 1770, we read: "There are two sorts of presses in use; the old and the new-fashioned press; the old sort till a few years ago were the only ones used in England."

As the eighteenth century drew to a close, a number of inventors in Europe and America, none of whom was a printer, began to grapple with the problem of further improvements in press construction. One of these was Adam Ramage, who in 1796 began to build presses in Philadelphia. Ramage introduced a triple-thread, rapid-motion screw which increased speed and production. He lived until 1850. Contemporary with Ramage in America, a titled Englishman was im-



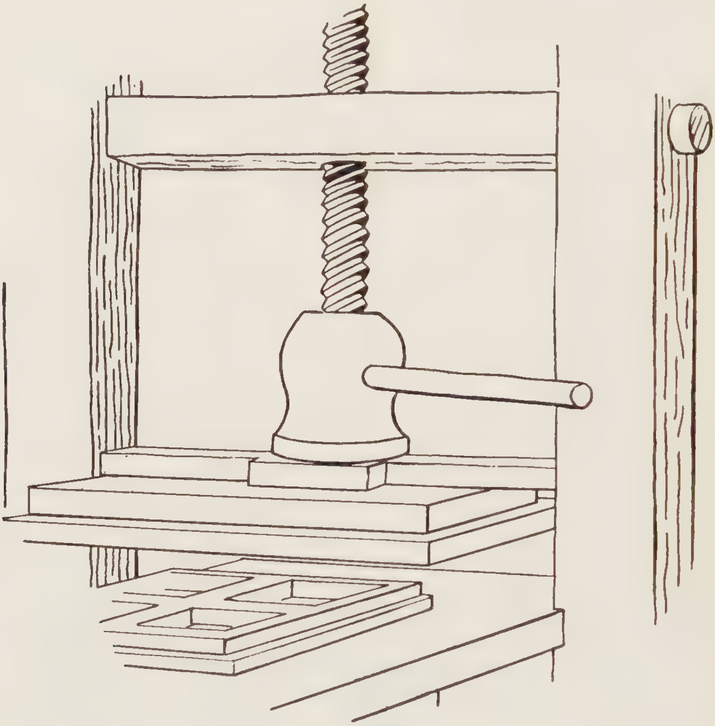
EPISTOLAE
Gullielmi Budęi, Secretarii Regii,
Poſteriores.

Prelum
Aſceſianū
15
20

Vęnundantur Iodoco Badio,cum gratia
& priuilegio in triennium,

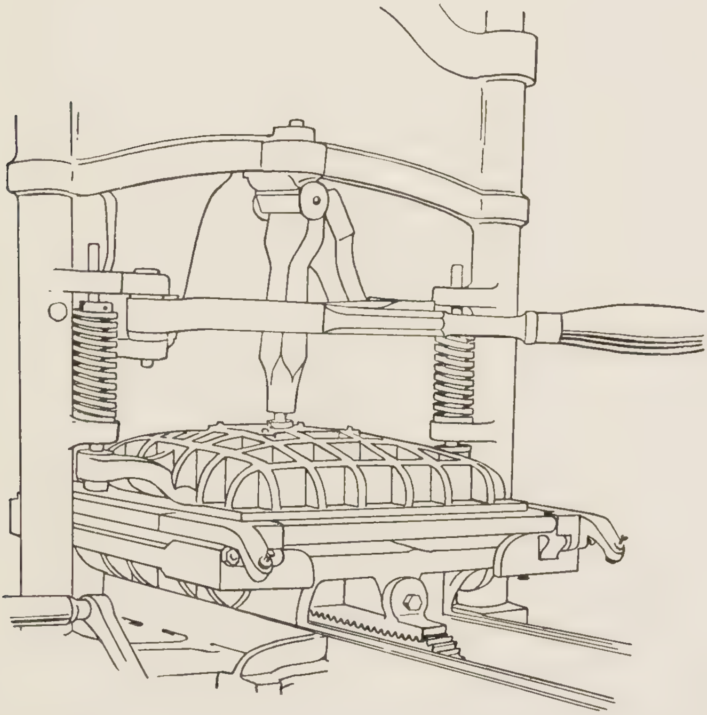
Title page of a book printed by Jodocus Badius, Paris, 1522. It illustrates the position of the wooden hand press between floor and ceiling. (Compare with illustration on page 149.)

proving press design in England. He was Charles, third Earl of Stanhope (1753–1816), scientist, inventor, and mathematician. Stanhope's press, which came out in 1800, was made entirely of iron. It took a full sheet and incorporated a number of other improvements. Stanhope made further contributions to printing by devising a system of logotypes and improving the method of stereotyping.



Wooden hand press worked by lever and screw. With but little improvement it was used from the beginning of printing until the end of the eighteenth century.

George Clymer (1754–1834) developed in Philadelphia early in the nineteenth century a press he called the "Columbian" which did away entirely with the screw, substituting for it a series of compound levers which multiplied the pull of the operator. Clymer went to London in 1817 and built presses there until his death. The Columbian press was larger and stronger than the Stanhope and could be worked with greater ease.

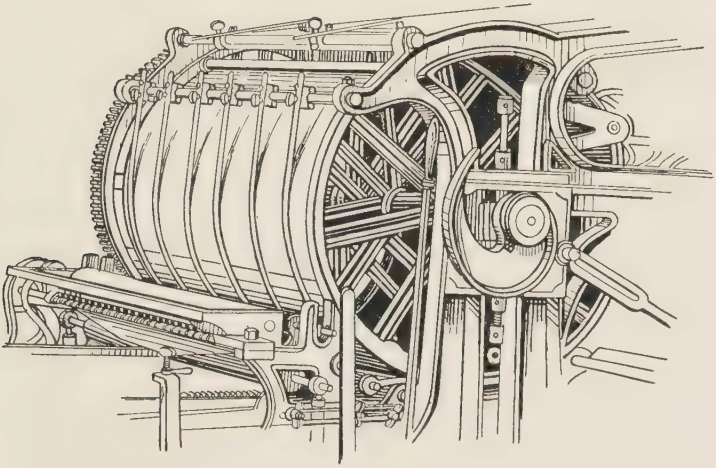


Iron hand press worked by lever and toggle joint; invented in 1829.

The hand-lever press took its final form in 1829, when Samuel Rust patented what he christened the Washington hand press, by which name it is still known. The pressure upon the form is applied by straightening and thereby elongating, with a pull of a lever, a toggle-jointed bar. Rust, however, was not the first to apply the toggle joint to a printing press. Peter Smith, an American connected with R. Hoe and Company, had used it in 1822, and he had pirated the idea from John J. Wells, by whom it was originated. The principle is simple and seems only a step removed from that of the screw, but the step took four hundred years to develop.

William Nicholson (1753–1815), an English author and inventor, is the first on record to devise a workable design for a printing machine driven by power. Nicholson conceived not only a cylinder but a rotary press as well. His patent specifications were issued on April 29, 1799. Wilson and Grey, authors of *A Practical Treatise upon Modern Printing Machinery and Letterpress Printing*, give their endorsement to the statement that Nicholson's specifications "embraced more original ideas than any other single patent applicable to printing that was ever granted." His ideas, however, ingenious as they were, never were put to practical use, and he died in a debtors' prison.

It remained for Friedrich Koenig (1775–1833), a Saxon ex-printer who went to England in 1806, to produce the first practicable power printing machine. Koenig had visited various Continental cities in an unsuccessful effort to raise the capital needed to put into effect his ideas for a power press. After a period of similar discouragement in London he secured the active interest of Thomas Bensley, one of the city's prominent printers. Bensley invested in the enterprise and induced others to do so. The result was the completion in 1811 of the first cylindrical printing machine. At first it was generally scoffed at, but when in 1814 two of the Koenig presses were erected in the plant of the London *Times*, it was conceded that a new principle in printing had been definitely established.



Stop-cylinder power press, in which the cylinder stops while the type bed reciprocates; invented in 1814.

Koenig was greatly assisted by the interest and support of John Walter (2d) who at the time was the publisher of the *Times*. As often happens, the proposal to substitute power for manual labor met with the opposition of the workmen. Ten years before they had made trouble over a similar project, and this had caused Walter to conduct Koenig's experiments in a separate building under conditions of the utmost secrecy. The *dénouement* is thus related by Walter's biographer:

> The night on which this curious machine [the printing press] was first brought into use was one of great anxiety and even alarm. The suspicious pressmen were directed to wait for expected news from the Continent. It was about six o'clock in the morning when Mr. Walter went into the press-room and astonished its occupants by telling them that the *Times* was already printed by steam; that if they attempted violence there was a force ready to suppress it; but that if they were peaceable, their wages should be continued to every one of them till similar employment could be procured; a promise which was no doubt faithfully performed; and having so said, he distributed several copies amongst them. Thus was this most hazardous enterprise undertaken and successfully carried through, and printing by steam on an almost gigantic scale given to the world.

The "gigantic scale" was 1,100 copies per hour.

In building the *Times* press Koenig had been aided by a fellow countryman, Andrew F. Bauer. They made an attempt to follow it with a perfecting press, their patent being dated December 24, 1814, but it did not prove successful in operation. In 1815 the two returned to Germany, where near the city of Wurzburg they established a printing-press factory which is still in existence.

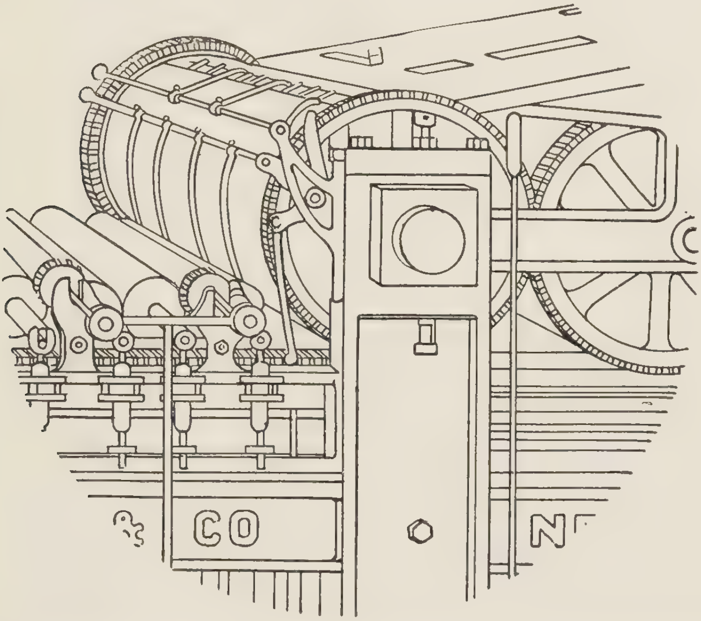
One baffling obstacle to progress that confronted every printing-press inventor was the problem of ink distribution. Padded ink balls gave a good result, but they were slow of operation. Inking by roller was evidently the proper system, but the covering of the roller had necessarily to carry a seam where the ends were joined, and this seam made a bad streak across the form. Stanhope, Nicholson, Koenig—in fact, all the inventors who were producing printing presses—attacked the problem but failed to solve it. A London printer named Forster finally arrived at a solution. He had observed that decorators of porcelain used for printing upon its surface a substance made of glue and treacle, and enlisting the aid of an engineer named Dorkin, he evolved in 1810 a metal roller covered with a composition that distributed printing ink successfully. Baxter is the name of the inventor of composition rollers cast in molds. R. Harrild, his apprentice and son-in-law, established in London the first firm of printer's-roller makers.

Job presses were invented early in the nineteenth century. At first they were designed for operation by foot power. A man bearing the appropriate name of Daniel Treadwell, of Boston, took out the first American patent on a device of this kind in 1826, but it did not come into general use. Samuel Ruggles, also of Boston, had better success with a press for which he began to apply for patents in 1840, but his press was predestined to ultimate failure because the form had to be placed in it upside down. The correct job-press operating principle was definitely established with the award of a patent in 1850 to George P. Gordon of New York. So universal was the adoption of the press made by Gordon that his name came in time to be a common designation applied to job presses generally.

A distinct type of platen press, known as the "Universal" or "Colt's Armory," was invented by Merritt Gally (1839–1916) of New York, a former printer and an inventor active in several different fields. This press is heavier than the Gordon type and consequently slower. It has been extensively used for the production of fine work in all parts of the world.

The first cylinder presses were used exclusively in newspaper offices. A power press invented by Isaac Adams of Boston in 1830 and named after him came into very general use in job offices during the middle period of the nineteenth century, but it was not a cylinder press. The bed was moved up and down by power, and the impression was made against the platen from below, the sheets being controlled by tapes. It was long believed that cylinder presses could not be made to meet the requirements of fine book work. At the first national gathering of employing printers, held in New York in 1866, a committee appointed to consider the matter rendered a report to that effect.

Koenig's first power press was a stop-cylinder, with three stops during each revolution, during one of which the bed reciprocated. The second press Koenig erected carried a drum cylinder with a flattened side which permitted return of the bed without stopping the cylinder. The two-revolution press was invented by an English press manufacturer, D. Napier, who took out patents covering a number of improvements between 1825 and 1830. The cylinder on the two-revolution press is smaller and therefore speedier. It is raised by toggle joints during its second revolution to permit return of the bed. Napier was the first to substitute grippers for tapes or strings for controlling the sheets.



Two-revolution press, in which the cylinder rises and makes a second complete turnover while the type bed reciprocates; invented about 1830.

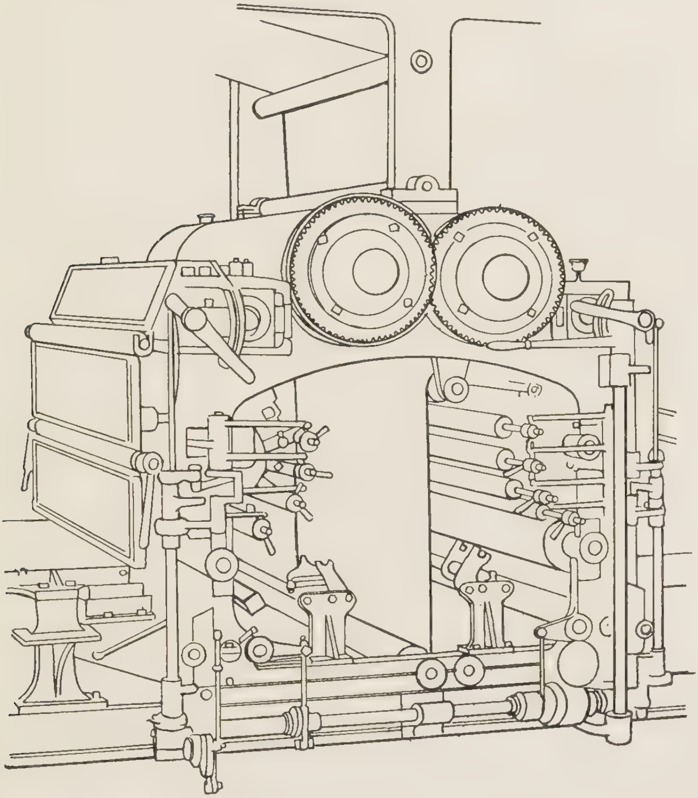
The first power presses in America were made by R. Hoe and Company about 1830. In 1832 Robert Hoe

(1784-1833) sent a representative to Europe, and the result was the manufacture by the firm during the years immediately following of three types of presses, known as the "single small cylinder," "the double small cylinder," and the "large cylinder perfecting."

Although, as we have seen, Koenig's first press, patented in 1811, embodied the stop-cylinder principle, the press of that name and type did not come into general use until more than twenty years later. The name of a Frenchman, Dutrarte, is usually associated with the stop-cylinder press, his patents being dated 1832. R. Hoe and Company introduced it in this country a year later. In England it is known as the "Wharfedale."

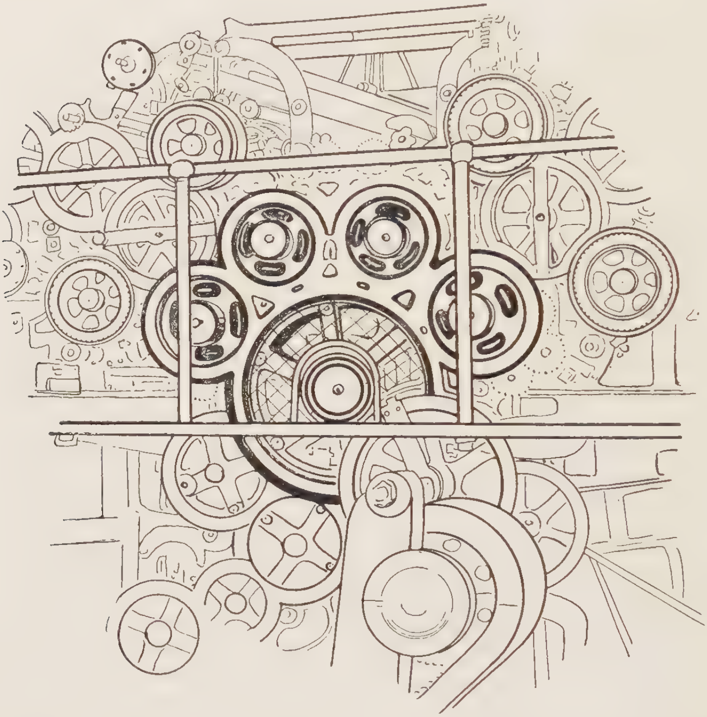
To William Bullock (1813–1867) of Philadelphia must be given credit for producing, in 1865, the first rotary perfecting press. It printed from curved stereotype plates. Bullock employed a pair of cylinders, each consisting of one form and one impression cylinder, for each side of the sheet, the impression cylinder for the second printing being extra large so as to take care of the offset caused by the first printing. The paper was fed from a roll and cut by serrated knives in the cylinders.

Automatic presses constitute one of the outstanding developments of recent years, and they have been almost exclusively the product of American invention. Among the job presses are the "Kelly," the "Miehle Vertical," the "Miller High-Speed," and the "Standard Automatic." The "Kelly" embodies the principle of the two-revolution press; the "Miehle Vertical," of the stop-cylinder; the "Miller High-Speed," of the two-revolution with stationary cylinder instead of stationary bed movement; and the "Standard Automatic," of the platen press. All have automatic feeding devices.



Rotary newspaper press, showing impression and form cylinder between which passes the paper as it is fed from a roll; invented, although not in this form, in 1865.

In newspaper printing the old style of deck construction has been superseded by what is known as "multiple-unit" construction, which means that as new units are added, the press is enlarged horizontally instead of vertically, thus permitting greater facility of operation. The Duplex Company has recently produced a press on what is known as the tubular system, in which a plate is cast as a tube instead of in semicircular form. The tube is slipped over a cylinder



Impression mechanism of a magazine press printing four colors at one operation.

which is smaller than the plate cylinder and thus revolves at higher speed.

Great changes have come in color printing. The Miehle two-color press is a two-revolution cylinder press of large size and capacity. The Cottrell magazine press prints two and four colors at one operation from curved plates. In the four-color press there are four form cylinders, one for each color, all printing at the same time against a single large impression cylinder. Offset is taken care of by a "traveling offset" device, which consists of two small cylindrical cores from one to the other of which there travels a strip of paper which prevents offset upon the tympan; when the strip has gone its full length, the cores are shifted automatically and the operation reversed. The printed sheets are dried in the press with a spray of paraffin powder. The McKee process, by which make-ready is done in the face of the electrotyped plate, is an important factor in tonnage production of two- and four-color work.

The rotary principle has come into vogue in the construction of lithographic presses also. The old-time stone has given way to zinc and aluminum sheets, and "offset" printing through the medium of a rubber blanket is making rapid strides.

CHAPTER XXVII

THE BINDING OF BOOKS

PHILLIATIUS, an Athenian who lived in the first century, is credited with being the father of bookbinding. He invented glue, or at least he was the first to use it for piecing together parts of papyrus manuscript books. Papyri were kept in rolls, which continued to be the form of books for about four hundred years. So highly was Philliatius esteemed because of his invention that the Athenians erected a statue to his memory.

The folded leaf came into use in the fourth century. Soon it was found that a covering was needed for manuscript books of the new form, and the calfskin parchment known as vellum was selected as the most durable material available. Vellum served the purpose admirably excepting in one particular: it curled. This defect caused the introduction into the binding of wooden boards, secured with a leather hinge which covered the "backbone" of the book—the forerunner of the "half-binding." In time the leather spread over the whole of the cover, other materials—paper, vellum, etc.—eventually displaced the wood stiffening, and the book thereby attained the form and substance it has since preserved.

The manuscripts of the early centuries were often gorgeously illuminated, and sometimes their bindings were in keeping with their inner decoration. During the sixth century precious stones were set into the coverings. A binding done in gold, into which jewels were set, for the Emperor Justinian I in the year 518 weighed fifteen pounds.

Ornamentation of ordinary bindings in the form of designs pressed into the leather did not begin until the twelfth century, although there are isolated examples which are believed to date much earlier. One such example is the manuscript book preserved at Stonyhurst, England, known as "St. Cuthbert's Gospels," believed to have been done in the seventh or eighth century.

The scribes who produced the manuscript books, and, in their turn, the first printers, did not number either pages or leaves. In order to lessen the possibility of errors in binding, the first word of each page was repeated at the bottom of the preceding page; this device required no mental effort on the part of the gatherer beyond the matching of the two words on the sheets.

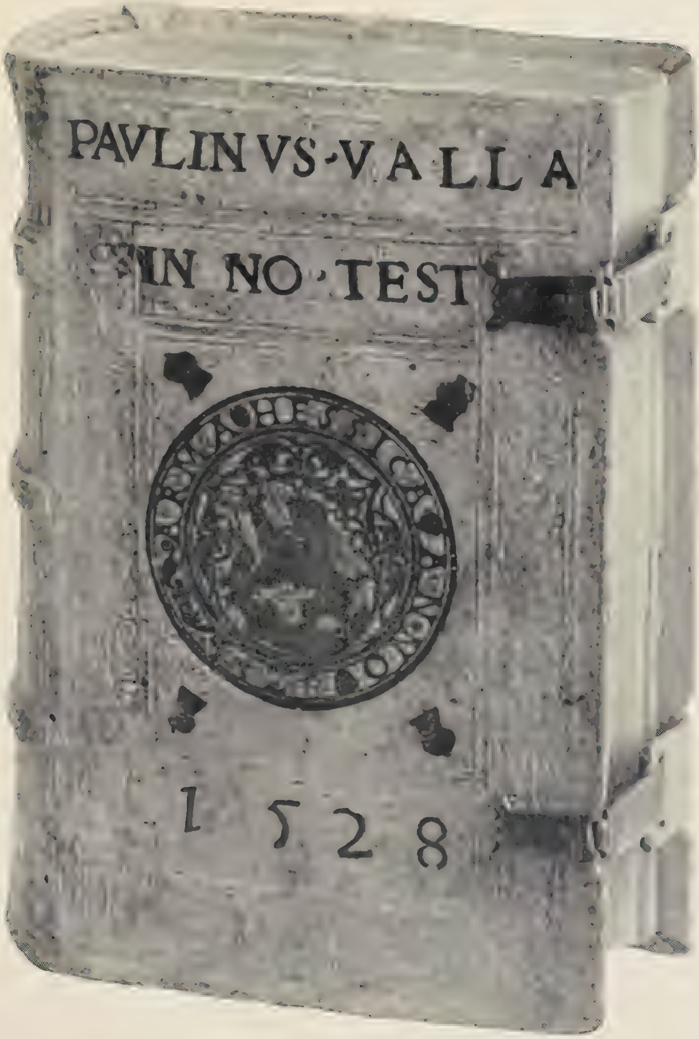
Although England lagged behind other European countries in the production of early illuminated manuscript books, she held a high place in that of bookbinding. "By the twelfth century England was at the head of all foreign nations as regards binding," says S. T. Prideaux in *A Historical Sketch of Bookbinding.* "London, Winchester, Durham, and a few other towns and monasteries had each their schools of binding. The covers of the books were tooled with numbers of small dies, and the beauty of the binding depended as much upon the individual delicacy and beauty of the stamps as upon their arrangement, which though infinitely varied, was very formal."

Blind stamping seems to have appeared in England and on the Continent at about the same time. The "Winchester Domesday Book," which dates from the twelfth century, now preserved in the library of the Society of Antiquaries of London, is about the finest of the earliest known examples.

Gold tooling arrived at the same time as the invention of printing from movable types. This new art of the binder reached its apogee in Venice, where it was probably brought from Arabia. Since Venice became the center of Italian printing, its preëminence in bookbinding also is easy to understand.

The name most prominently connected with the development of the binder's art in Venice is the one most frequently mentioned in printing history, Aldus Manutius. It is believed that Aldus operated a binding shop in connection with his printing office, and he is credited with the introduction of gold tooling. Painted mosaics and cameo bindings were originated in Italy at about the same time, the last quarter of the fifteenth century. When Aldus introduced the small printed book, he made the panel stamp for bindings an easy possibility, and it accordingly appeared during the period of his printing activity. He abandoned the use of boards in bindings.

Forel, "the rough undressed skin of the beast," was



An early sixteenth-century pigskin binding bearing the arms of the city of Hesse. Within its covers are four books illustrating various steps in bookmaking: a manuscript book, a printed book without numbered pages or leaves, another with numbered leaves, and still another with numbered pages.

used as binding material until the end of the fifteenth century. It was gradually displaced by calfskin, vellum, pigskin, and the skin of sheep and of dogs. The introduction of the tanned goatskin known as "morocco" from the Levant (hence its alternative name) brought a change in favor of that material. Levant morocco is clear in color, fine in grain, and soft yet firm to the touch. Morocco is produced in several countries, but the Levant has continued to hold its early supremacy.

Numbering of the leaves of both manuscript and printed books began about 1470, and by 1480 the practice had become general. Printed signatures first appeared in 1472. The numbering of pages of printed books did not become common until well along in the sixteenth century.

Identification of bookbinders with their work began early. Sometimes it took the form of a trade-mark or the binder's initials; at other times the binder gave his full name or concealed it in a rebus. It has already been noted that John of Westphalia, or, as he was more often called, John of Paderborn, stamped his portrait in outline on his bindings as a part of their decoration. John Richenbach of Geislingen stamped on his bindings his name and the date and also the name of the person for whom the book was bound. They are dated from 1467 onward.

The first use of cloth as a substitute for paper in commercial binding is usually held to have occurred in England in 1823. Brander Matthews, however, in

Bookbindings Old and New, mentions an edition in his possession of Watkin's *Life of Sheridan* printed in 1818 and bound the same year in calico.

Book jackets are not as exclusively modern as is commonly supposed. A fragment of one of English Tudor origin with a printed design is preserved in the Metropolitan Museum, and the Morgan Library has several Italian sixteenth-century examples.

CHAPTER XXVIII

EDUCATION IN THE PRINTING TRADE

THERE are now in the United States more than two thousand schools in which students are taught how to set type and run printing presses. So important has education in printing become that one of the great printers' supply houses maintains a special educational department devoted to the planning and equipping of printing outfits suited to instructional requirements. This condition is in striking contrast to that prevailing a third of a century ago, when there was in the United States not a single school or department of a school or printing establishment in which beginners were taught in a systematic manner even the rudiments of the trade to which they had pledged their futures.

There has been apprenticeship in printing almost from the invention of movable types, and from the first the rights and privileges of apprentices have been provided for in indentures. These obligated the master to teach the art and "mystery" (to use an early expression) of printing, but immediate rather than future production was the aim of the teaching, and whatever knowledge the apprentice acquired usually came to him by observation while engaged in the more or less menial tasks that are inseparable from printing-office routine.

When Gutenberg established the first printing shop in the middle of the fifteenth century, the relations between master, journeyman, and apprentice had become fairly well standardized in other trades. Workshops were small, and association between master and man was intimate. Often the journeymen lived with their employers; apprentices always did. Apprentices received board, lodging, clothing, and pocket-money, but no wages save in the concluding year or two of the lengthy term of indenture. The period was from four to seven years. The hours of labor were long. It was part of the apprentice's duty to keep the shop and equipment clean and in order, to mix ink, dampen paper, and, when physically able, work the hand press.

These conditions prevailed during practically the whole of the first three centuries of the printing industry and thus characterized the first hundred years of printing in Colonial America. Benjamin Franklin, whose famous *Autobiography* gives us the only contemporaneous picture of Colonial printing offices that has come down to us, states that his term of indenture to his brother James was nine years, the longest term, with one exception, of which I have been able to find a record. The exceptional case was that of Isaiah Thomas, next to Franklin the most famous of Colonial printers, whose term was thirteen years, beginning at the early age of eight. A summary of prevailing apprenticeship conditions in America in the eighteenth century is given in the following quotation from the terms of an old-time indenture:

> During which term the said Apprentice his Master faithfully shall or will serve, his secrets keep, his lawful commands everywhere gladly do. He shall do no damage to his said Master nor see it to be done of others; but to his power shall let, or forthwith give notice to his said Master of same. The Goods of his said Master he shall not waste, nor the same without license of him to any give or lend. Hurt to his said Master he shall not do, cause, nor procure to be done. He shall neither buy nor sell without his Master's license. Taverns, inns, or ale-houses he shall not haunt. At cards, dice, tables, or any other unlawful game he shall not play. Matrimony he shall not contract; nor from the service of his said Master day or night absent himself; but in all things as an honest and faithful apprentice shall and will demean and behave himself towards his said Master and all his during said term.

The attitude of the journeymen toward apprentices in the early days of the printing art seems always to have been one of antagonism. Among the demands in what has been termed the oldest of journeymen printers' documents, "The Case and Proposals of the Free Journeymen Printers in and about London," dating probably from 1666, there occur these clauses:

> That no forreigners (that is to say) such an one as has not served seven years to the art of printing, under a lawful Master Printer, as an apprenticeship, may be entertained and employed by any Master Printer for the time to come.
>
> That a provision be made to hinder the increase of apprentices and a limitation be appointed as to the number etc.

> That no turn-overs be received by any Master Printer, but from a Master Printer; and that no Master Printer turning over any apprentice to another Master Printer may be permitted to take any other apprentice in his place till the full time of the said apprentice so turned over be expired; for otherwise the restraint and limitation of apprentices will be evaded, and the number be supplied by turn-overs.

In 1798 there occurred in London a dispute over printing-office apprenticeship which had a singular result. Pressmen made a demand that their master should not bind more than three apprentices to each seven presses. The master refused to comply, and a strike was called. The master thereupon caused warrants to be issued against eighteen of the journeymen for conspiracy. They were tried, found guilty, and, declining to apologize, were sentenced to two years' imprisonment.

Grumblings of a tenor similar to those of the quotation above appear in the pronouncements of the journeymen's societies of later years. Eventually, in America at least, the complaints took a more positive tone, as witness this paragraph from the preface to the constitution of the New York Typographical Society adopted in 1833:

> Another cause of depression was the practice, which then prevailed, and has continued more or less to the present time, of employing runaway or dismissed apprentices for a small compensation. These were called two-thirds men, and have always proved a great pest to the profession. Added to this, roller boys, having gained admission to the

interior of a printing office, have in a short time found their way from the rear to the front of the press, to the discharge of the regular pressman.

The fire that had been long smoldering burst into sudden flame in 1834 in the famous "General Duff Green Case." Green was the publisher of a newspaper in Washington and also printer to the United States Senate. In 1833 he began to employ "two-thirders" on his newspaper, and he increased the number of apprentices in that section of his establishment in which the Government printing was done. This practice was objectionable to the local union, but it was tolerated without opposition until Green announced his intention of founding what he called the Washington Institute, in which 200 boys each year were to be taught the printing art. Each boy was to have the sum of two dollars per week set aside for him in a trust fund which was to be paid to him at the end of the period of his agreement provided he lived up to its terms.

The Columbia Typographical Society called on January 11, 1834, a special meeting to consider the matter, at which a resolution of protest was adopted and a committee was appointed to report at a later meeting. Green published an elaborate prospectus of his school in his newspaper, *The Telegraph*, and the Typographical Society countered with an "Address to the People of the United States," a document of about four thousand words in which the evils sure to result from the proposed "Manual Labor School" were set forth in detail. At one of the meetings called by the Society more than three hundred persons were present. On March 14, 1835, a strike was called against General Green's establishment which lasted almost to the end of the year.

The protests of the Columbia Typographical Society against the Washington Institute were sent to every journeymen's society throughout the country, and many sympathizing resolutions resulted. This first example of coöperation on a national scale naturally foreshadowed the formation of a national association of journeymen printers, which was effected in Washington in November, 1836. The National Typographical Association, of which we shall have more to say in the next chapter, after adopting a constitution issued an address to local societies in which various "regulations" were suggested with a view to securing uniformity in local enactments. The clauses relating to apprentices were as follows:

> Article 1. Every apprentice shall serve until he be 21 years of age; and at the time of entering as an apprentice shall not be more than fifteen years of age; and every boy taken as an apprentice shall be bound to his employer in due form of law.
>
> Article 2. No runaway apprentice shall be received into any office in the United States attached to the National Society, either as an apprentice or journeyman.
>
> Article 3. Any boy who may be legally released from his master may be received into another establishment to serve out the remainder of his apprenticeship, provided he has not been legally released for his own bad conduct.

Article 4. That on the death of his master, or if, from any cause, the office wherein he was indented shall cease to be, he may be taken into another office, and be regularly indented to finish the term of his apprenticeship.

Article 5. After the——day of——, 18——, it shall not be lawful for any local society to consider any application for membership unaccompanied by the credentials of the applicant that he had served the period of six years as a regularly indented apprentice at the printing business.

Article 6. That after the——day of——it shall not be lawful for any local society to permit members of said society to work in any office where boys may be taken as apprentices to the printing business, to serve for a less period than six years.

The Boston union in 1848 refused to admit to membership any worker who had not served a four-years apprenticeship, and the Pittsburgh union in 1849 passed a resolution making the ratio of apprentices to journeymen one to three.

The National Association formed in 1836 after meeting the following year failed to function successfully again until 1850, when it was revived at a meeting in New York. At this meeting it recommended, among other things, indenturing apprentices for five years and limiting their number but did not suggest a ratio. After 1850 the Association met annually with the single exception of 1861, the year of the outbreak of the Civil War, but the subject of apprentice training seems to have come before none of the conventions until 1870, and then only for discussion which did not result in action. Thereafter it drops out of the annual *Proceedings* of the conventions, to reappear for only casual mention more than thirty years later.

The International Typographical Union has never maintained a school to teach youths the practical details of printing. In 1907, however, it instituted a system of correspondence-school instruction, the course comprising 37 lessons covering the subjects of freehand lettering, principles of design, color, composition, and imposition. Recently the International Union created a Department of Education with a salaried official in charge, with the purpose of giving greater attention in future to educational matters. The International Printing Pressmen and Assistants' Union maintains at its headquarters in Pressman's Home, Tennessee, a fully equipped technical school for apprentice and continuation instruction which is said to represent an investment of nearly two million dollars.

The international association of employers, the United Typothetae of America, in its early decades occasionally dealt with the subject of apprenticeship at its meetings, but only from the shop-practice, not the educational, point of view. A change came in the year 1906, when at the annual convention there appeared an educator who presented a plan for a trade school in which to teach printing. A Committee on Education was appointed, and on its report a year later a modest sum was appropriated for its use. Out of this small beginning there grew a technical school of printing at Indianapolis which turned out hundreds of skilled compositors and pressmen. This school has been combined with a school previously established at the Carnegie Institute of Technology in Pittsburgh, which has been endorsed by the United Typothetae and to which the organization has contributed an endowment fund of $225,000.

The Southeastern School of Printing, maintained at Nashville by the employing printers of Tennessee and the other states of the Southeast, is an outstanding example of a successful school managed entirely by printers. Well-equipped printing schools are a part of Wentworth Institute in Boston and Dunwoodie Institute in Minneapolis. There are public or semi-public schools in every large city and privately maintained schools in a number of printing plants. Notable among the latter are the schools of the Lakeside Press of Chicago and the Foote and Davies Company of Atlanta. In New York City, in addition to ten printing trade schools under the public school system and four under private or semi-private ownership and management, there are schools for composing-room apprentices and for printing pressmen managed and financed jointly by the unions and the employing printers.

The Committee on Education of the United Typothetae of America has functioned on the broadest possible basis. It has planned and is issuing a series of textbooks, each devoted to some particular phase of the printing craft, which when completed will comprise about sixty volumes. One of the most useful of its publications is a volume of about one hundred pages entitled "Teaching Apprentices in the Printing Trades." The Committee has prepared a series of lessons on special subjects which constitute a course of study in locally organized classes. Students in these courses receive certificates under certain conditions and diplomas on graduation.

CHAPTER XXIX

ORGANIZATION IN THE PRINTING TRADE

THERE were organizations among masters and workmen in various trades in Europe in the first half of the fourteenth century, but no record has been preserved of any organization connected with printing and the making of books earlier than the middle of the fifteenth. The first on record was known as the Guild of St. John the Evangelist, which received its charter in Bruges in 1454. Printing from movable types had already been invented but was practiced only in Germany; consequently the Guild of St. John did not number typographers in its membership. Printers, however, were included, those who made impressions on hand presses from wooden blocks; and other tradesmen admitted to membership were scriveners, illuminators, engravers, parchment- and vellum-makers, bookbinders, booksellers, etc. There was at about the same time a similar organization in Antwerp called the Guild of St. Luke, and another in Brussels bearing the name of *Les Frères de la Plume* (Brothers of the Pen).

That there was coöperation, if not organization, among printers, both masters and men, during the first half-century of the practice of the art is evidenced by this entry discovered in the records of Basel for the year 1471:

> December 24. The City Court arranged the following agreement between the masters who print the books and their men: the men are to go back to work to-day, to do their work for the masters' best advantage, to be of good behavior, and to form no league among themselves. The masters are to give their men what is fair whether food, drink, or any other thing. If the men should quarrel or misbehave in any way, the masters might dismiss them on payment of the due proportion of their year's wages. Similarly, if any man had received unfair treatment at the hands of the masters, he might leave his situation, and the masters are to pay him the due proportion of his year's wages.

The most important early organization of master printers and publishers on the Continent of Europe of which there is a record was the Guild of Venice, established nearly a hundred years later, in 1548–9. The Guild continued in existence until 1806, the year after Venice came under the rule of France through annexation to the Kingdom of Italy set up by Napoleon Bonaparte. At one time it exercised a considerable influence and was financially prosperous enough to erect a Guild Hall, which was opened in 1642. The best-known organization of the kind, the Stationers' Company of England, was formed in London in 1556 and is still in existence. It has played an important part in the history of English book production, and its present home, Stationers' Hall, is one of London's most interesting landmarks.

In 1589 there was organized the Guild of the Printers, Publishers, and Booksellers of Milan, Italy. No one was eligible for membership who had not served an apprenticeship of eight years to a printer or bookdealer in Milan. The admission fee was for natives 30 lire, for others 100 lire. It was a mutual benefit association, operating under royal decree. The principal purpose of the Guild was to do away with "outside" competition, and in this effort it seems to have been successful.

The trade guild was an outstanding factor in the economic and social life of the Middle Ages, and this form of organization gradually made its appearance in the printing industry. There was then no manufacturing as we know it, and almost no large printing establishments. The master printer did almost everything in connection with literary production—edited (sometimes wrote) the copy, designed and cast the type, made the ink, set the type, and printed and bound the book. The workman's hours of work were long, averaging fourteen per day, and the pay was small, although printers were better paid than workers at some other trades. The record of a suit at law at Lyons in 1572 testifies that the 3,350 sheets per day required of a pressman working at a hand press compelled him to labor from two o'clock in the morning until eight or nine in the evening. Relief from the long hours of labor was afforded by numerous holidays, most of them religious. When the holidays had been subtracted from the total of the days of the year, fewer than two hundred forty actual working days remained. There are records of strikes in Lyons and Paris from 1539 to 1572.

The trade guilds sometimes included both masters and workmen. Disputes between the two were usually settled by arbitration. The workmen in the larger establishments were organized into "chapels," and strikes occasionally occurred. King Francis I of France, who took more than the usual interest of royalty in printing, issued an edict forbidding printers' strikes when it was represented to him that they interfered with the progress of the art.

The trade guild accepted full responsibility toward the general public for quality of production, which it insured through employment of competent inspectors. At the same time it guarded itself against overproduction by limiting the number of establishments. Its standards of practice were high; it protected its workmen and helped to maintain the social order. Although founded in trade, the medieval guilds were closely identified, as is indicated by the names quoted above, with religion. That it was a militant religion is attested by the fact that each guild was prepared to furnish, if called upon, a certain number of fighting men to serve under its banner.

Just when workmen in the printing trade set up for the first time an organization that was independent of the masters is not known. In 1635 the journeymen printers of London petitioned the Stationers' Company for the abolishment of certain abuses, among the demands being that no books set in nonpareil should exceed an edition of 5,000 copies, or set in brevier, 3,000 copies (except the privileged books).

The record appears in the "Calendar of State Papers," but there are no particulars of an organization, if there was one.

One William Prynne is credited with having written in England during the seventeenth century nearly two hundred books, and it is not surprising to find that he included in them something relating to our present subject, as he must have included most other subjects. Prynne records the fact that in 1642 the printers of London protested to the Government against the granting of exclusive privileges, or patents, to several printers, as follows: Christopher and Robert Barker, for printing Bibles and other religious books in English; John Norton, for printing Bibles in Latin, Greek, and Hebrew, and other books in English; Richard Tottle, for printing law books; and Thomas Syncocke, "for printing all things that are, may or shall be printed upon one side of a sheet, or any part of a sheet, provided the other side be white paper." Prynne gives no further particulars beyond recording that the protest was ineffectual.

Brentano, in his *History and Development of Guilds and Trade Unions*, quotes a petition by the Free Journeymen Printers in and about London, who were licensed on October 23, 1666, which would seem to indicate some kind of organization among them at that time. The petition gives the total number of workmen printers as being "one hundred and forty or thereabouts." Its demands for the limitation of apprentices have been noted in the preceding chapter.

A law passed in England in 1799 forbade combinations among journeymen, and under it nineteen printers employed on the London *Times* were convicted. All were fined and received prison sentences varying from nine months to two years. The law was repealed in 1825.

From the writings of Madame Campan we obtain the following evidence of the existence of a society of printers in Paris in 1790: "When the news of the death of Dr. Franklin arrived in Paris, a society of printers met in an apartment of the Cordeliers convent to celebrate a funeral festival in honor of the American philosopher."

When printing came to the American Colonies in 1638, the oldest settlement in New England, where the Press was first set up, had been in existence but eighteen years. The next hundred years brought printing offices to but half a dozen towns in the English Colonies. With such a slow growth it could not be expected that organization in the trade would make much progress. The country was new, and its inhabitants were too busy subduing the forces of nature to the primary requirements of food, clothing and shelter to give heed to movements of an ordinary business and social nature. Printing was conducted along very elementary lines. Small newspapers, some pamphlets, an occasional book, usually of a religiously polemical nature, constituted the product of the average printing shop in America during the first two hundred years of its history. There were few offices, and not many men were employed in them. The first American printers were publishers also, and in the newspapers that many of them conducted they indulged in the practice, still sometimes followed, of saying unkind things about their competitors. There was little friendly feeling among them.

The first act of coöperation in the American industry on record is to be found in the *Autobiography* of Benjamin Franklin. When the youthful Benjamin served notice upon his brother James, to whom he had been apprenticed, that their relations were to end, James went to the other master printers in Boston and induced them to refuse employment to his rebellious younger brother.

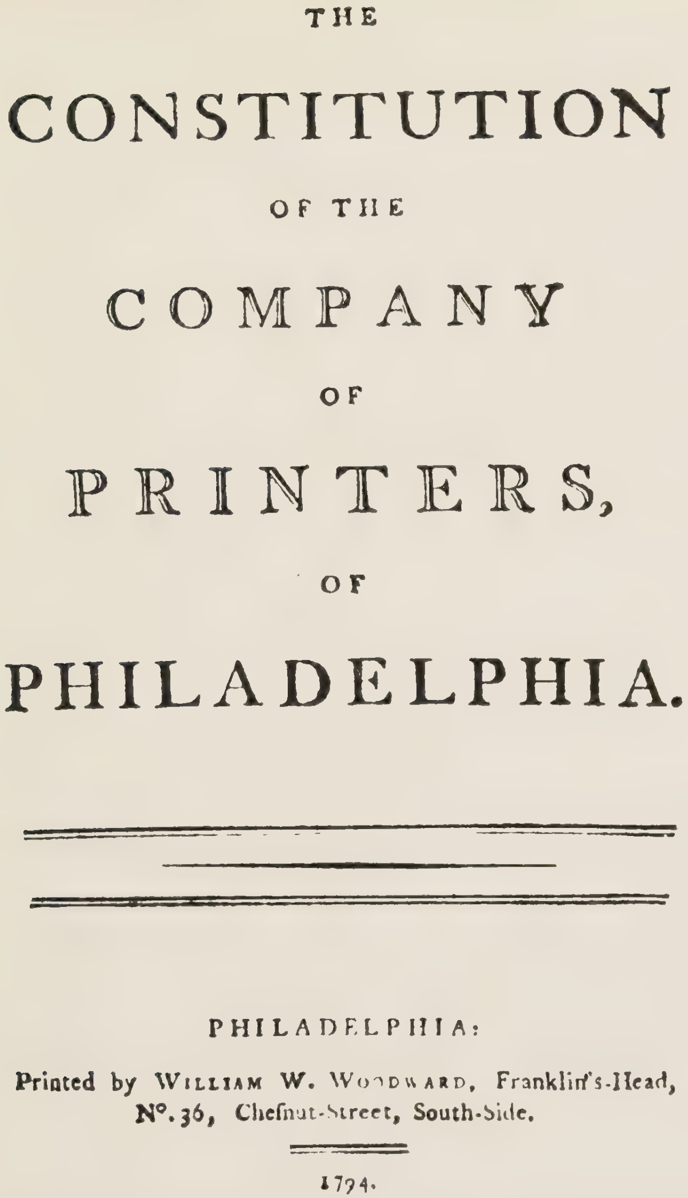
The first strike on the part of printers occurred in Philadelphia in 1776. The strike was successful, and the union or "association" that had conducted it dissolved. Ten years later the Philadelphia employers got together temporarily and decided to reduce wages. Under date of June 7, 1786, Henry Myers called a meeting of protest at his house, and 26 of the workmen who responded signed an agreement not to work for less than six dollars per week. Neither of these two organizations of employees survived the emergency that called it into existence.

Seventy years after James Franklin accomplished his boycott against the most famous of American printers, the first organization of printers in the New World was formed. The place was Philadelphia, where Benjamin Franklin was rounding out his long career of service to the infant Republic. Isaiah Thomas tells in his *History of Printing* the story of the first meeting:

> In 1788, about two years before his death, a number of printers and booksellers met together in Philadelphia, to form some regulations for the benefits of the trade. Bache, grandson of Franklin, and myself, were of the number. After the first meeting I conversed with Dr. Franklin on the subject of our convention. He approved the measures proposed and requested that the next meeting might be at his house as he was unable himself to go abroad. The meeting was accordingly holden there; and although he was much afflicted with pain, he voluntarily took minutes of the proceedings and appeared to be interested in them.

A footnote is added by Thomas to this effect: "Several attempts have been made to establish rules and regulations for the benefit of the trade, but they have generally not proved successful."

The Company of Printers of Philadelphia was organized in 1794. Nine printers signed the constitution, a copy of which has been preserved in the Library of Congress at Washington. The initiation fee was two dollars and the annual dues one dollar. In view of these low entrance and maintenance fees the withdrawal fee, which was fixed at ten pounds, seems out of proportion, although only half as large as the fee decided upon under similar conditions by the New York printers a year later. There was a provision, however, that the withdrawal fee might be remitted by consent of two-thirds of the members present at any meeting. Meetings were held quarterly.



THE

CONSTITUTION

OF THE

COMPANY

OF

PRINTERS,

OF

PHILADELPHIA.

PHILADELPHIA:

Printed by WILLIAM W. WOODWARD, Franklin's-Head,
N°. 36, Cheſnut-Street, South-Side.

1794.

Title page of Constitution of the Company of Printers of Philadelphia, founded in 1794.

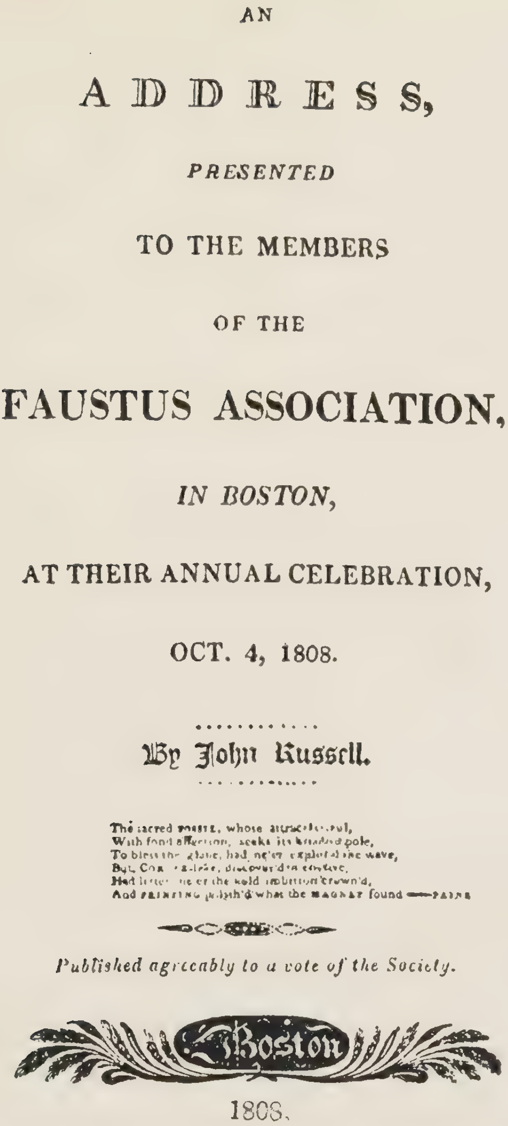
In the Typographical Library and Museum of the American Type Founders Company in Jersey City is preserved a printers' price-list dated New York, 1795, and signed by ten New York printers. A condition of the agreement was: "We do further agree that if either of us do work at a less rate than is here established, we will forfeit the sum of twenty pounds, to be appropriated as a majority of us shall think proper." Twenty pounds was a large sum, and it showed that the signers were very much in earnest. The agreement was clearly in restraint of trade and would not be lawful in these modern times. None of the ten whose names are attached to the document is mentioned in the list of New York printers given by Isaiah Thomas in his *History of Printing*, which was published in 1810, and nothing is known of any of them save Thomas Greenleaf and the Swordes brothers, T. and J., whose names appear in connection with the formation in 1801 of a national association of booksellers.

In 1794 an organization of workmen was formed in New York City under the title of the Typographical Society. It lasted two and a half years. In 1799 the Franklin Typographical Society of Journeymen Printers of New York organized, with George Bruce as its first secretary. George Bruce was a compositor, and David Bruce, his brother, a pressman. They started in the printing business in New York in 1804, and by 1809 "they had the largest printing office in New York City, furnishing work to nine double-pull wooden hand presses." They abandoned printing for type-founding in 1813.

The Franklin Typographical Society formulated a complete wage scale, the first in New York City. It prescribed a piece rate of 25 cents per thousand ems and a wage of seven dollars per week in book and job offices and eight dollars in newspaper offices. The Society first met in the homes of its members, but a notice of a meeting called by John Collins, the secretary, for February 5, 1803, published in the New York *Daily Advertiser*, shows that it had then attained the dignity of having its own rooms, which were located at 63 Stone Street. The yellow-fever epidemic in New York in 1803 was disastrous to printers as it was to many other classes of the population, and it is not surprising to find in the New York *Evening Post* of September 19 the following: "The president of the Franklin Society of New York acknowledges the receipt of $83.50 from the Philadelphia Typographical Society for the relief of such of our members as may be distressed in consequence of the prevailing epidemic." The Society went out of existence in 1804.

The Philadelphia Typographical Society was organized in 1802 and, still existing, enjoys the distinction of being the oldest printing organization in America. Its constitution as first formulated had some interesting features. The president held office for one year, but the vice-president for only four months. The directors, elected for four months, were divided into classes, so that there was an election of three or more directors at each monthly meeting. Three candidates for the office of treasurer were nominated by the membership, one of whom was elected to serve for one year by the board of directors, with the provision that the directors voting for the successful candidate became responsible for the honest and faithful performance of his duties. There were provisions under the head of "Alimony" for sick and death benefits and for a strike fund, believed to be the first of its kind in this country. The document is said to be the oldest constitution of a labor organization extant in the United States. In 1807 the Society adopted measures which have a modern aspect, such as the working card, demand for exclusive employment of its members, and an employment-bureau system suggestive of the modern "house of call."

Isaiah Thomas makes the statement that the Boston Typographical Society was organized in 1803 but gives no particulars. The latest known mention of the Society was in 1826, in the minutes of the Columbia Typographical Society of that year, where a communication from the Boston organization is acknowledged. An organization of employing printers was formed in Boston in 1805 under the name of the Society of Printers of Boston and Vicinity. Its objects were stated to be "the elevation of the printing art, the regulation of trade and prices, the preservation of good fellowship, and the forma-



AN

ADDRESS,

PRESENTED

TO THE MEMBERS

OF THE

FAUSTUS ASSOCIATION,

IN BOSTON,

AT THEIR ANNUAL CELEBRATION,

OCT. 4, 1808.

By John Russell.

The sacred MAGNET, whose attractive soul,
With fond affection, seeks its kindred pole,
To bless the globe, had ne'er explor'd the wave,
But, Com[illegible], discover'd [illegible],
Had letters ne'er the bold ambition crown'd,
And PRINTING publish'd what the MAGNET found.—PAINE.

Published agreeably to a vote of the Society.

Boston

1808.

Title page of the earliest known copy of an address to an organization of employing printers. Boston, 1808.

tion of a Fire Society for the protection of printing offices." The name was changed in 1808 to the Faustus Association. It ceased to exist in 1815, but the "Fire Society" was preserved until the reorganization of the Boston Fire Department in 1826. The Franklin Typographical Society of Boston, organized in 1822, is still in existence. Its membership includes both employers and employees, and its constitution expressly forbids any discussion of trade matters.

That there was a Typographical Society in Baltimore in 1815 is proved by a contemporaneous reference to it. It had probably been organized some years before, since it is spoken of as one of the older societies, but the facts are not known. The present Typographical Union of Baltimore was organized in 1831 under the title of the Baltimore Typographical Society. Unfortunately the records of all the early Baltimore organizations were lost in the great fire of 1904.

From 1804 to 1809 there seems to have been no organization of either workmen or employers in the printing trade of New York. In July of the latter year the New York Typographical Society was instituted, and in September it adopted and presented to the employers a new scale of wages. The employers immediately formed themselves into an association about which no particulars have been preserved excepting the name, the Master Printers Association of New York. Negotiations between the two organizations failed, and a strike which lasted until late in December was called, ending in a practical victory for the workmen. In 1810 a new demand, reënforced by a strike, was made, but this strike failed. Another demand for an increase, this time to nine dollars per week, was made in 1815; this was granted by most of the employers but not until another strike had been called. There is in the Typographical Library and Museum of the American Type Founders Company a scale of prices for printing agreed upon at a meeting held by the Master Printers of New York on September 18, 1815.

The New York Typographical Society later changed in character and membership from an employees' organization dealing with labor matters to one composed of both employees and employers. It still exists as a benefit society, holding meetings at stated intervals in the rooms of the New York Employing Printers Association.

The journeymen printers of New York formed on June 17, 1831, the Typographical Association of New York, independent of the New York Typographical Society, for the purpose of negotiating with the employers in relation to hours and wages. It called a strike which was only partly successful. In a circular letter issued by the Typographical Society on June 29, 1837, mention is made of a "recently organized combination on the part of our employers," but no facts about the "combination" are known.

The Philadelphia Typographical Association was formed in 1831 and lasted until 1839 or 1840. In

1835 it made a demand for an increase of wages to nine dollars per week, "ten hours to constitute a day's work and twenty cents an hour for overwork." In the same year the employing printers of Philadelphia formed themselves into an association and adopted a scale of prices for composition and presswork.

Early in the year 1834 the Benevolent Typographical Society of Richmond, Virginia, was formed and made a demand upon the employers which was granted. In a letter which the secretary addressed under date of March 1, 1834, to societies in other cities occurs the phrase, "So far we have no rats."

In 1814 and 1815 printers' societies were formed in Boston, Albany, and Washington, but the Boston and Albany organizations later disbanded. New Orleans organized an association in 1830, and by 1835 societies of printers had been formed in all the principal cities. In June of the latter year the Franklin Society of Cincinnati sent out a call for a national convention, which materialized more than a year later in the meeting held in the aldermen's chamber of the City Hall of Washington for five days beginning November 7, 1836, with delegates present from the cities of Baltimore, New York, Washington, Philadelphia, Harrisburg, and (by proxy) New Orleans. The Philadelphia delegate was excluded because he was discovered to have previously worked in Washington as a strike-breaker. On his return to Philadelphia he was expelled by the local union.

The organization formed at this meeting under the name of the National Typographical Association issued an address to the printers throughout the United States which dealt with a number of grievances. The grievance receiving the most space, as we have seen in the preceding chapter, was the question of apprenticeship. Another paragraph read as follows:

> From recent attempts at encroachments on the rights of journeymen, and to prevent such in future, it has been judged most prudent to seek safety in union. This concert of action becomes the more imperative, since we daily perceive the rapid strides which printing is making over a vast extent of country, and the measures which may be adopted to injure us. It is a lamentable fact that the newspaper press has almost entirely passed from under the control of members of the profession into the hands of speculators and partisans, who, ignorant of the feelings and sympathies of the craft, create dissensions and difficulties when they cannot make them subservient to their will and interest.

Thus the journeymen printers put on record their opinion that proprietorship of a printing shop and of the newspaper that usually was issued from it should belong exclusively to one who had been graduated from their own ranks; they resented the intrusion of "speculators and partisans."

In 1848 the Typographical Union of Boston was organized, this, it is believed, being the first use of the word "union" to designate a printing-trade association. New York followed with the organization on January 19, 1850, of the Typographical Union, now "Big Six." Horace Greeley, editor and publisher of the New York *Tribune*, was its first president, and Thomas N. Rooker, foreman of the *Tribune's* composing room and later an active member of the Typothetae, was its first secretary.

The Philadelphia Journeymen Printers' Union was formed in 1850, during a series of meetings beginning on June 27; other meetings were held on July 13 and 27, and finally a constitution and by-laws were adopted on August 10. The Union started with 444 members. A new scale was presented to the employers, to go into effect on September 2. Some employers refused acceptance, and a strike affecting about a hundred men was called. One method adopted to raise strike funds was the publication of two editions, totaling 3,000 copies, of *Robinson Crusoe*, which a statement in the book says were immediately subscribed for.

Other cities followed with similar organizations under the word "union." On December 2, 1850, there assembled in New York the first national convention of union printers of the United States, with delegates from New York, Albany, Baltimore, Trenton, Philadelphia, and Louisville. A national executive committee was formed, and under its auspices a second convention assembled in Baltimore on September 12, 1851, with delegates present from the cities named and in addition Utica, Boston, Pittsburgh, Harrisburg, Richmond, and Cincinnati. A constitution was adopted under the name of the

National Typographical Union. This name was changed to the International Typographical Union at the annual convention in Albany in 1869, at which time the organization was made up of 120 local unions and had a total membership of 7,563. By 1927 the number of local unions had grown to 807 and the total membership to more than 72,000.

The International Typographical Union maintains its headquarters in a fine mansion surrounded by five acres of ground in the residential section of Indianapolis. It maintains also a home for indigent and incapacitated members at Colorado Springs, Colorado. Its annual receipts from members amount to more than two and a half million dollars. Its financial statement shows balances in its old-age-pension, death-benefit, and general funds amounting to more than five million dollars.

Until 1873 workers at the press in American and Canadian printing shops belonged to the typographical unions. At the International Union convention in Montreal in that year an amendment to the constitution was adopted granting separate charters to local unions of pressmen of seven or more members. At the Philadelphia convention in 1892 it was reported that 22 of these unions, with a total membership of 1,447, held charters under the International Union. At Chicago a year later it was reported that about a third of these pressmen had seceded and joined the International Printing Pressmen and Assistants' Union, which had been organized in New York City on October 8, 1889. At the International Typographical Union convention in Louisville in 1894 an agreement was ratified between the three international unions representing the typographers, the pressmen, and the bookbinders, under the terms of which each was to restrict its membership to workers in its own department of the printing industry, with freedom to manage its affairs independently of the others.

The International Printing Pressmen and Assistants' Union in 1927 comprised 386 local branches in the United States and Canada with a total membership of 47,000. It maintains headquarters, a sanitarium for disabled members, and a technical school at a village, largely of its own creation, bearing the name of Pressmen's Home near the city of Knoxville among the mountains of Tennessee.

There may have been organizations of employing printers in the United States during the first half of the nineteenth century other than those already mentioned, but if so their existence was but temporary. Definite history in New York City connects with the year 1859, when Theodore Low De Vinne, then a young man of thirty-one who had already become a partner in the firm of Francis Hart and Company, met with a few other members of the craft to discuss ways and means of forming an employing printers' association. Meetings were held occasionally through the years immediately following, but no organization of a permanent nature resulted. The country was in the throes of the Civil War, and projects of all kinds that had not some connection with the war were more than likely to be deferred. The name of the association that rather nebulously represented the industry during those troublous years was at one time the Employing Printers' Association, and at another, the Printers of New York.

The master printers of Boston and neighboring cities formed on January 19, 1863, the New England Association of Printers and Journalists, which a year later changed its name to the New England Franklin Society. In April, 1864, a committee prepared a pamphlet giving a scale of prices which was based largely upon a New York scale previously published.

Just as the Civil War was drawing to an end, the Typothetae was formed in New York. The place was Dodsworth Hall, on Broadway, and the date, March 21, 1865. The name chosen was made up from two Greek derivatives, *typo*, meaning "type," and *thetae*, "putters" or "placers." At the second meeting a scale of prices was adopted. The Typothetae of New York met with more or less regularity until 1868, when it became dormant and so remained until 1883. It was revived in that year and has continued in active existence since.

The first national convention of employing printers was called to meet in New York on February 20, 1866. Delegates were invited from all important Eastern printing centers, but only Cambridge, Boston, and Hartford responded.

The United Typothetae of America came into being in 1887, the main cause being a demand on the part of the Typographical Union for a reduction in working hours from ten to eight with no reduction in pay. At the first meeting, held in Chicago on October 18, 1887, Theodore L. De Vinne, although not present, was elected president. Local organizations were formed in the principal cities throughout the United States and Canada, most of which became branches of the United Typothetae. Later associations were formed in many localities under the name of Ben Franklin Clubs, and they in turn formed a national association under the title of the International Ben Franklin Clubs. The two national associations amalgamated in 1913 under the name of the United Typothetae and Ben Franklin Clubs of America. This name was later shortened to its earlier and its present form of the United Typothetae of America.

In 1909 there assembled in Chicago a great gathering of employing printers which was named the First International Cost Congress. It was called by a group of far-seeing men who enunciated the doctrine that printing is such a specialized business that ordinary accounting methods are not adequately applicable to it, and they proposed through organized effort to formulate a system of accounting that would fit the peculiar needs of the business. Printers' cost congresses were held at central points throughout the United States and Canada for several years. The American Printers' Cost Commission was formed, and as a result of its efforts a cost system was devised and installed in plants throughout the United States and Canada to an extent that put the industry on a basis of much more accurate estimating and much greater financial stability.

Beginning with about the year 1900 there were in the larger cities price-making organizations known as "printers' boards of trade." They functioned to the considerable financial advantage of their members, but eventually they were disbanded because of a belief that if tested in the courts they would be found to be in conflict with the laws against combinations in restraint of trade.

In 1901 the proprietors of many of the smaller printing offices in New York City formed an organization under the name of the Master Printers of New York. In 1906 another organization of New York employing printers was formed under the name of the Printers' League for the principal purpose of dealing with labor problems. The Printers' League and the Typothetae of New York in 1916 amalgamated under the title of the New York Employing Printers Association, and the Master Printers of New York joined the Association in 1920. This organization now comprises more than eight hundred members, nearly five hundred of which are printing establishments. It maintains a number of active departments, including: employment, credits and collections, legal and legislative, educational, cost service, etc. The other local branches of the United

Typothetae throughout the United States and Canada are organized along similar lines.

In 1909 there was formed in New York an organization of foremen and superintendents and their assistants under the name of the New York Club of Printing House Craftsmen. Similar clubs were formed in other cities, and at a meeting in Philadelphia in 1919 all the clubs came together as the International Association of Printing House Craftsmen. Under its management several great expositions of printing machinery and methods have been held.

The London Association of Master Printers, founded in 1785, pursued a more or less uncertain course until 1836, when it was succeeded by the London Master Printers' Association. This Association existed until 1870, when it disbanded because the trade was in so tranquil a state that there seemed to its members to be no reason for continuing an employers' organization. It was revived in 1890 and now numbers more than a thousand members. The Federation of Master Printers of Great Britain and Ireland was formed in 1901.

Organization has been responsible for the formation of two insurance companies operating solely within the printing trade. One is the New York Printers' and Bookbinders' Mutual Insurance Company, which writes only casualty insurance, and the other is the Graphic Arts Fire Insurance Company. The fire company carries only selected and segregated risks. In 1928 its policies totaled over six million dollars.

Although the event may not come directly under the head of organization, this chapter cannot better be brought to a close than with a reference to two international gatherings of representatives of the printing industry. The first was held in Paris on August 20, 1878, during the International Exposition. Two hundred and thirty persons were present, representing Austria, Belgium, England, France, Germany, Italy, Portugal, Russia, Spain, Switzerland, Turkey, and the United States. The second took place at Göteborg, Sweden, in 1923. The following countries were represented: Australia, Belgium, Denmark, Esthonia, Finland, Germany, Great Britain, Holland, India, Italy, Norway, Russia, Spain, Sweden, and the United States.

BIBLIOGRAPHY

AMES, JOSEPH: *Typographical Antiquities, Being an Historical Account of Printing in England.* 1749. Considerably augmented by W. Herbert 1785–90. Revised by Thomas F. Dibdin 1810–19.

AURNER, NELLIE SLAYTON: *Caxton, Mirrour of Fifteenth-Century Letters.* 1926.

BLADES, WILLIAM: *The Biography and Typography of William Caxton, England's First Printer.* 1861–63. Revised edition 1877. One-volume edition 1882.

BOUCHOT, HENRI: *The Book.* 1890.

BROWN, HORATIO F.: *The Venetian Printing Press.* 1891.

Catalogue of Books Printed in the XVth Century Now in the British Museum. Parts I to V. 1908–1924.

CHATTO, WILLIAM A.: *The History and Art of Wood-Engraving.* 1848.

CONWAY, WILLIAM MARTIN: *The Woodcutters of the Netherlands in the Fifteenth Century.* 1884.

DE RICCI, SEYMOUR: *A Census of Caxtons.* 1909.

DE VINNE, THEODORE L.: *Historic Printing Types.* 1886.
The Invention of Printing. 1878.

DIBDIN, THOMAS F.: *Bibliomania.* 1809.
Bibliotheca Spenceriana. 1814–5.
The Bibliographical Decameron. 1817.
A Bibliographical, Antiquarian and Picturesque Tour in France and Germany. 1821.
Aedes Althorpianae. 1822.
The Library Companion. 1825.
Bibliophobia. 1832.
Reminiscences of a Literary Life. 1836.
A Bibliographical, Antiquarian and Picturesque Tour of the Northern Countries of England and Scotland. 1838.

DIDOT, AMBROSE FIRMIN: *Essai sur la Typographie.* 1851.
Histoire de la Typographie. 1882.

Duff, E. Gordon: *Early Printed Books.* 1893.

Evans, Charles: *American Bibliography.* 1901–1925.

Greswell, E.: *A View of the Early Parisian Greek Press.* 1833.

Greswell, William P.: *Annals of Parisian Typography.* 1818.

Grey, Douglas, and Wilson, Frederick J. F.: *A Practical Treatise upon Modern Printing Machinery and Letterpress Printing.* 1888.

Haebler, Konrad: *The Early Printers of Spain and Portugal.* 1897.

Heckethorn, Charles W.: *The Printers of Basel in the XV and XVI Centuries.* 1897.

Hildeburn, Charles R.: *Sketches of Printers and Printing in Colonial New York.* 1895.

Humphreys, H. Noel: *A History of the Art of Printing.* 1868.
Masterpieces of the Early Printers and Engravers. 1870.

Jackson, John: *A Treatise on Wood Engraving.* 1861.

Linton, W. J.: *The History of Wood Engraving in America.* 1882.

Lippmann, Friedrich: *The Art of Wood Engraving in Italy in the Fifteenth Century.* 1888.

Madan, Falconer: *Books in Manuscript.* 1893. Revised edition 1920.
The Early Oxford Press. 1895.

Maittaire, Michel: *Annales Typographici ab Artis Inventae Origine ad Annum.* 1719–41.
Annales de l'Imprimerie des Estienne. Second edition 1843.

Martin, John: *A Bibliographical Catalogue of Books Privately Printed.* 1884.

Matthews, Brander: *Bookbindings Old and New.* 1896.

McKerrow, Ronald B.: *An Introduction to Bibliography.* 1927.

Meerman, Gerardo: *Origines Typographicae.* 1765.

Moxon, Joseph: *Mechanick Exercises.* 1677–83.

Otley, W. Y.: *An Enquiry Concerning the Invention of Printing.* 1837.

Peddie, R. A.: *Printing: A Short History of the Art.* 1927.

Plomer, Henry R.: *Short History of English Printing.* 1900.

Pollard, Alfred W.: *Early Illustrated Books.* 1893.
Last Words on the History of the Title-Page. 1891.
Fine Books. 1912.

Putnam, George Haven: *Books and Their Makers During the Middle Ages.* 1896.

Reed, Talbot Baines: *A History of the Old English Letter Foundries.* 1887.

Renouard, Antoine Augustin: *Annales de l'Imprimerie des Alde.* 1834.

Roden, Robert F.: *The Cambridge Press.* 1905.

Rooses, Max: *Christophe Plantin, Imprimeur Anversois.* 1883. Revised edition 1913.

Thomas, Isaiah: *The History of Printing in America.* 1810. Revised edition 1874.

Timperley, C. H.: *A Dictionary of Printers and Printing.* 1839. Reprinted 1842.

Updike, Daniel Berkeley: *Printing Types, Their History, Forms, and Use.* 1922.

Warren, Arthur: *The Charles Whittinghams, Printers.* 1896.

Watson, James: *The History of the Art of Printing.* 1713.

Weitenkampf, Frank: *American Graphic Art.* 1912.
How to Appreciate Prints. 1916.

Willems, Alphonse: *Les Elzevier, Histoire et Annales Typographiques.* 1880.

Wilson, Frederick J. F., and Grey, Douglas: *A Practical Treatise upon Modern Printing Machinery and Letterpress Printing.* 1888.

Wroth, Lawrence C.: *A History of Printing in Colonial Maryland,* 1686–1776. 1922.

INDEX

INDEX